Government of India
Ministry of Environment, Forest and Climate Change
IA Division
(Thermal Projects)
****

सत्यमेव जयते

Minutes of AGENDA FOR 28th MEETING OF THE EXPERT APPRAISAL COM MITTEE (EAC) (THERMAL POWER PROJECTS) TO BE HELD ON 12-13TH A UGUST, 2025 DURING 10:30 – 17.30 HRS THROUGH PHYSICAL MODE. meeti ng Thermal Projects held from 12/08/2025 to 13/08/2025

Date: 26/08/2025

MoM ID: EC/MOM/EAC/782911/7/2025

Agenda ID: EC/AGENDA/EAC/782911/7/2025

Meeting Venue: Narmada Hall, MOEF&CC, New Delhi

Meeting Mode: Physical

Date & Time:

12/08/2025	10:30 AM	05:30 PM
13/08/2025	10:30 AM	05:30 PM

1. Opening remarks

At the outset, Shri. Inder Pal Singh Matharu (I.F.S Retd.), Chairman, Expert Appraisal Committee (Thermal Power & Coal Mining) welcomed the Expert members & other participants and requested to start the proceeding as per the agenda listed for this meeting. The list of members who participated in the meeting is at **Annexure – I**. The Standard/Generic ToR conditions shall be system generated through the PARIVESH Portal.

[The Original PDF of the MoM is attached at page no. 263-512]

2. Confirmation of the minutes of previous meeting

Confirmation of the Minutes of the 27th Meeting of the EAC (Thermal): The minutes of the 27th meeting of the EAC (Thermal) held on 08/07/2025 has been confirmed by the EAC as uploaded on Parivesh.

3. Details of proposals considered by the committee

Day 1 -12/08/2025

3.1. Agenda Item No 1:

3.1.1. Details of the proposal

Expansion of Coal Based Thermal Power Plant (Phase-II) from 3x600 MW to 6x600 MW by M/s KSK Mahanadi

Power Company Limited at Village Nariyara, Tehsil Akaltara, Dist. Janjgir-Champa (Chhattisgarh) by **KSK M AHANADI POWER COMPANY LIMITED** located at **JANJGIR-CHAMPA,CHHATTISGARH**			
Proposal For		Fresh EC	
Proposal No	**File No**	**Submission Date**	**Activity (Schedule Item)**
IA/CG/THE/544973/2025	J-13012/44/08-IA.II(T)	18/07/2025	Thermal Power Plants (1(d))

3.1.2. Project Salient Features

28.1 Expansion of Coal Based Thermal Power Plant (Phase-II) from 3x600 MW to 6x600 MW by **M/s KSK Mahanadi Power Company Limited** located at Village Nariyara, Tehsil Akaltara, **Dist. Janjgir-Champa, Chhattisgarh - Environmental Clearance under S.O. 1247(E) dated 18.03.3021 – regarding.**

[Proposal no. IA/CG/THE/544973/2025, F.No. J-13012/44/08-IA.II(T)]

28.1.1: M/s. KSK Mahanadi Power Company Limited (KMPCL) has made an online application vide proposal no. IA/CG/THE/544973/2025 dated 18/07/2025 along with copy of EIA/EMP report, Form and Certified compliance report, seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at item no. 1(d) Under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level. The project do not attract the provisions of general condition of the EIA Notification, 2006.

Name of the EIA consultant: M/s Greencindia Consulting (P) Ltd, Ghaziabad. [S. No. 114. List of ACOs with their Certificate No.: NABET/EIA/2326/RA 0297 (Valid up to Feb 22, 2026).

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

28.1.2: The project site mentioned above have obtained following Environmental Clearance from MoEF&CC:

i. The existing project was accorded environmental clearance vide letter no. J -13012/44/08– IA.II (T) dated 19/10/2009 from MoEF&CC for setting up of 6x 600 MW TPP.

ii. Out of 6x600MW, 3x600 MW (Unit-2, Unit-3 and Unit-4) coal based sub-critical thermal power plant has already been commissioned during 2013 and 2018 and units are fully operational at present. Consent to Operate for 3 x 600 MW (Unit 2,3 & 4) was accorded by Chhattisgarh Environment Conservation Board, Raipur vide letter no 903/TS/CECB/2024 dated 29/04/2024 with validity up to 17/05/2026. The balance 3x600 MW (Unit-1, Unit-5, and Unit-6) coal based sub-critical thermal power plant was under construction and the construction activities were suspended (before October 2019) due to financial constraints. The construction activities related to Unit No. 1, 5 & 6 was completed to the extent of 67.14%. Further, KMPCL has obtained Structural Stability Certificate from the Expert approved by Chief Inspector of factories, Govt. of Chhattisgarh. It is certified that the present existing structures of Unit1, 5 & 6 are structurally stable and suitable for continuation of work towards completion.

S. No.	Configuration	Capacity (MW)	Date of EC	Implementation Status	Production as per CTO
1	6x600	1800	19/10/2009	**3x600 MW (Unit-2, Unit-3 and Uni**	1800 MW

				t-4 coal based sub-critical thermal power plant was commissioned during 2013 and 2018 and are fully operational Construction activities related to Unit No. 1, 5 & 6 was completed to the extent of 67.14% and same suspended before October 2019 due to financial constraints	

28.1.4: The instant proposal of M/s KMPCL is for seeking fresh Environmental clearance for unit no. 1, 5 & 6 (3 x 600 MW) to complete the commissioning of the constructed facilities (as 67.14% of TPP construction activities have been completed) as per MoEF&CC notification S.O. 1247 (E) dated 18/03/2021 under EIA, 2006.

28.1.5: Status of present level of construction of 3x600 MW (Unit 1, 5 & 6)

Name of the facility	Status of construction work	Percentage of construction works
Unit 1 (600 MW)	Ø Majority of Boiler Structure erection complete Ø All foundations of BTG complete, TG foundation partially complete Ø Air-Preheater and Bunker partially erected. Ø Majority of Power House Building Erection complete Ø Cooling Towers civil works mostly complete	65.1
Unit 5 (600 MW)	Ø Boiler structure erection complete Ø All foundations of BTG Equipment complete including TG Deck Ø Majority of ESP Erection complete. Ø Boiler Drum, Pendant Superheater and Reheater, Air-Preheater, Bunker Erection complete. Ø Majority of Condenser Erection complete Ø Cooling Towers civil works mostly complete	82.4
Unit 6 (600 MW)	Ø All foundations of BTG Equipment complete, TG foundation partially complete Ø Majority of Power House Building Erection complete .	53.7

	Ø Cooling Towers civil works mostly complete	
Common facilities	Ø 275 M tall stacks (2 Nos, tri flue) complete. Ø Water Treatment Plant Complete Ø Raw Water Reservoir and Ash Dykes complete Ø Ash Slurry Disposal system, Silos complete Ø Coal Handling Plant complete, Ø 400-KV Switch-yard complete	100%

The request letter for latest & updated 'Certified Compliance Report' (CCR) has been submitted to RO, Raipur vide letter dated 27.01.2025 and the site visit was completed on 26. 03.2025. CCR with observations received on 05.06.2025. Action taken report on observations submitted to Regional Office on 09.06.2025 and the same is summarized as below:

S. No.	Non compliances details	Observation of RO (abridged)	Condition no.			Re-assessment by RO / Response by PP
			EC date	Specific	General	
1	-	The stipulated condition No.(xl) of EC letter No.J-13012/44/2008-IA.II(T) dated 23/9/2015 is repugnant with the additional condition stipulated in the Ministry's O.M. dated 28/8/2019 regarding use of Fly ash as soil conditioner in agriculture needs. Ministry may examine the same and the EC conditions, which are repugnant with each other may be amended appropriately. Ministry may consider issuance of EC, superseding the existing ECs and amendments already accorded to avoid multiple statutory documents for the same project.	23/9/2015	xi	-	KMPCL will request for amendment in the existing EC for suitable directions in this regard.
2	-	From the Undertaking submitted by the Project Authority, it has been observed that project authority has spent only part of the amount earmarked	19/10/2009	3 (vii)	-	• KMPCL has been directed by MoEF&CC vide letter dated 19.10.2009 to spend Rs.64 crores on CSR in the span of 5 years, during co

S. No.	Non compliances details	Observation of RO (abridged)	Condition no.			Re-assessment by RO / Response by PP
			EC date	Specific	General	
		in the stipulated EC condition. However, part of the facilities (three Units) still has not been implemented and thus Ministry may take appropriate view in this regard -– condition No.3(ii), (xliv) and condition No.(iv) of the EC letter dated 19/10/2009.				nstruction of the project for 6 units (6x600 MW). In compliance to this direction, CSR activities were started from 2009 and Rs. 59.45 crores have been spent till date, even though KMPCL was admitted into NCLT and declared as Non performing Asset (NPA). • Now, KMPCL is committed to continue the promised CSR activities with the left over funds of Rs. 4.55 crores in addition to the CER fund as part of expansion proposal • KMPCL has earmarked a budget of Rs.23 Crores towards CER activities for three years, FY-2025-26 to FY-2027-28 in compliance to TOR conditions and to meet the requirements raised during recent public consultation held in April 2025.
3	-	Harnessing solar power within the premises of the plant have not been implemented as stipulated in the condition No. 3(xxxv).	19.10.2009, 24.01.201223.09.2015	xxxv		Feasibility study has been completed for roof top solar installation. Estimated capex for 4 MW roof top solar installation is INR 18 Cr, which will be implemented progressively in three years.
4	-	The condition No.	19.10.2009, 24.01.2	xxxvi		• The Radio-active

S. No.	Non compliances details	Observation of RO (abridged)	Condition no.			Re-assessment by RO / Response by PP
			EC date	Specific	General	
		3(xxxvi) regarding long term study of radio activity / an in-built continuous monitoring for radio activity and heavy metals in coal and fly ash have not been complied with. If there is any practical difficulty in the implementation of the condition, project authority ought to have amended the condition from the MoEF& CC. The feasibility and availability of technology in India for in-built continuous monitoring of radio activity and heavy metals in coal and fly ash needs to be examined and Ministry may take appropriate view in this regard.	01223.09.2015			element was tested for Fly ash and Bottom Ash by Modern Test Centre Berhampur Odisha in 2021. Report submitted. • Radio activity analysis for Coal & Ash samples were analysed in April 2025 by Govt. of India Dept. of Atomic Energy Board of Radiation and Isotope Technology, Mumbai. Report submitted. • The same Tests shall be carried out on yearly basis and reports shall be submitted to MoEF & CC as part of compliance report.
5	-	Details are not made available regarding CSR Committee or a social audit committee or suitable credible external agency appointed for proper and periodic monitoring of CSR activities undertaken – condition No.3 (xlv).	19.10.2009, 24.01.201223.09.2015	xxxxv		After take over of KMPCL by JSW Energy, a CSR committee has been constituted and relevant resolution of the board in this regard is available. A reputed independent external agency will be engaged for evaluation of CSR activities and the report will be made available by March 2026.
6	-	Details are not made available regarding additional 50 Ha of afforestation – Additional condition No.6(ii)in	12.08.2021	6(ii)	-	The Amendment of EC with above condition was issued vide letter no. J-13012/44/2008-IA.I(T)dated 13.08.2021 for retrofitting APC eq

S. No.	Non compliances details	Observation of RO (abridged)	Condition no.			Re-assessment by RO / Response by PP
			EC date	Specific	General	
						uipment to meet the revised emission norms dated 07.12.2025. Accordingly, additional plantation in 50 Ha will be developed in next 5 years @ 2500 saplings/ Ha. **Plantation Action Plan** Year wise plantation plan is as under: FY 25-26: 5 Ha FY 26-27: 10 Ha FY 27-28: 15 Ha FY 28-29: 10 Ha FY 29-30: 10 Ha

28.1.7: Status of FGD installation

- There are no Critically Polluted Areas (CPAs) and non-attainment cities within the 10-km radius of the KMPCL plant area.
- The balance under construction Units -1,5 & 6 of KMPCL are located within the same premises and do not fall within any CPA nor in any non-attainment cities as per MoEF &CC notification G.S.R. 465(E) dated 11/07/2025. **Hence, it is also classified as C-Category project.**

As per the MoEF&CC notification dated 07.12.2015 and its subsequent amendment notification G.S.R. 465(E) dated 11/07/2025, KMPCL thermal power plant falls under Category C, compliance is required only with stack height norms under GSR 742(E) dated 30.08.1990 guidelines. In this regard, 2 stacks of 275-m each with tri flue are already existing. Boilers of Unit 1,2 & 3 are connected to one stack and boilers of Unit-4,5 & 6 are connected to another stack.

Utilisation of existing stacks without FGD (as per notification dated 11.07.2025) with Hybrid ESP & with NOx control (Low NOx burners and SOFA) is proposed to meet the permissible emission norms as per the notification dated 07.12.2015.

- Categorization details of TPP: The proposed project falls under Category C (Other than those included in Category A and B) in terms of the provisions under notification dated 11/07/2025.
- Sulphur content of the coal to be fired in the boiler: 0.4% – 0.5%

ii. Status of FGD installation for existing unit: Not installed. However guidelines/ directions as per GSR 787 (E) dated 30.12.2024 & MoEF&CC notification dated 11.07.2025 will be adhered to.

iii. Action plan for installation of new stack in compliance to the notification number GSR 742 (E) dated the 30/08/1990 for the proposed expansion: Complied. Two stacks of 275-m height were already existing and the proposed units will be attached to the existing stacks; no new stack is envisaged.

Proposal No with date	Consideration	Details	Date of accord	ToR Validity	Remarks
IA/CG/THE/209699 /2021 dated 20/05/2021	12th, 17th and 24th EAC meetings held on 1	Terms of Reference	27/06/2022	26/06/2026	Public Hearing was exempted by the EAC as

	4th June, 2021, 30th November, 2021 and 9th May, 2022 respectively				per S.O. 1247(E) dated 18.03.3021. However, public consultation through written responses has been prescribed.

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>1</td><td>Total land</td><td>828.46 ha
Entire land has been sourced during 2007-2009 for 6x600 MW plant and is under possession of KMPCL.
No additional land proposed to be acquired.</td><td>Land use: Industrial</td></tr>
<tr><td>2</td><td>Land use break up</td><td>
<table>
<tr><th>Sr. No.</th><th>Facilities</th><th>Existing Area in Ha</th></tr>
<tr><td>1</td><td>Main Plant</td><td>35.96</td></tr>
<tr><td>2</td><td>Coal Handling System</td><td>71.19</td></tr>
<tr><td>3</td><td>Railway facilities</td><td>47</td></tr>
<tr><td>4</td><td>Water System</td><td>77</td></tr>
<tr><td>5</td><td>Switch Yard</td><td>41</td></tr>
<tr><td>6</td><td>Green belt</td><td>277</td></tr>
<tr><td>7</td><td>Additional Green belt including Miyawaki</td><td>52</td></tr>
<tr><td>8</td><td>Ash Pond</td><td>66</td></tr>
<tr><td>9</td><td>Workshop, Store, Project yard, Hydrogen Plant</td><td>85.21</td></tr>
<tr><td>10</td><td>Parking, Road</td><td>39.8</td></tr>
<tr><td>11</td><td>Labor Colony</td><td>36.3</td></tr>
<tr><td></td><td>Total</td><td>828.46</td></tr>
</table>
</td><td></td></tr>
<tr><td>3</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014 & 20/02/2025</td><td>The proposed expansion is within the plant premises area. The land is already under the possession with KSK Mahanadi Power Company Limited.
No additional land acquisition is envisaged for the Units 1, 5 & 6.</td><td></td></tr>
<tr><td>4</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Project site: No land acquisition required for the Units 1, 5 & 6.
Study Area:
<table>
<tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Tarod</td><td>0.5 km</td><td>NE</td></tr>
<tr><td>Rogda</td><td>0.5 km</td><td>NW</td></tr>
<tr><td>Banahil</td><td>0.46 km</td><td>E</td></tr>
<tr><td>Nariyara</td><td>0.70 km</td><td>S</td></tr>
</table>
</td><td></td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>5</td><td>Existence of school and hospitals if any.</td><td>
<table>
<tr><th colspan="3">School</th></tr>
<tr><td>Govt. Naveen Primary School, Patel paraa</td><td>0.6 km</td><td>NE</td></tr>
<tr><td>Govt. High school, Kirari</td><td>2.39 km</td><td>E</td></tr>
<tr><td>Govt. Middle school, Dev Kirari</td><td>3.15 km</td><td>E</td></tr>
<tr><td>Govt. Boys Middle school, Nariyara</td><td>1.87 km</td><td>SW</td></tr>
<tr><td>Swarsati sisu mandir, Nariyara</td><td>1.89 km</td><td>SW</td></tr>
<tr><th colspan="3">Hospitals</th></tr>
<tr><td>Sub health centre, Tarod</td><td>0.73 km</td><td>NE</td></tr>
<tr><td>Health centre, Nariyara</td><td>0.3 km</td><td>S</td></tr>
<tr><td>Health care sub centre, Akaltara</td><td>2.5 km</td><td>E</td></tr>
<tr><td>Public health centre, Nariyara</td><td>2.5 km</td><td>SW</td></tr>
<tr><td>Public health centre, Gondadih</td><td>2.10 km</td><td>W</td></tr>
</table>
</td><td></td></tr>
<tr><td>6</td><td>Latitude and Longitude of all corners of the project site.</td><td>
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>21˚58′51″ N</td><td>82˚24′42″ E</td></tr>
<tr><td>B</td><td>21˚58′ 28″ N</td><td>82˚25′ 46″ E</td></tr>
<tr><td>C</td><td>21˚58′ 02″ N</td><td>82˚25′ 39″ E</td></tr>
<tr><td>D</td><td>21˚57′ 12″ N</td><td>82˚25′ 05″ E</td></tr>
<tr><td>E</td><td>21˚57′ 16″ N</td><td>82˚24′ 42″ E</td></tr>
<tr><td>F</td><td>21˚57′ 07″ N</td><td>82˚24′ 10″ E</td></tr>
<tr><td>G</td><td>21˚57′ 38″ N</td><td>82˚23′ 49″ E</td></tr>
<tr><td>H</td><td>21˚58′ 02″ N</td><td>82˚22′ 55″ E</td></tr>
<tr><td>I</td><td>21˚58′ 25″ N</td><td>82˚22′ 56″ E</td></tr>
<tr><td>J</td><td>21˚58′ 36″ N</td><td>82˚23′ 47″ E</td></tr>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>I</td><td>21°57'50.41"N</td><td>82°23'59.83"E</td></tr>
<tr><td>II</td><td>21°57'41.75"N</td><td>82°24'22.30"E</td></tr>
<tr><td>III</td><td>21°57'24.89"N</td><td>82°24'15.81"E</td></tr>
<tr><td>IV</td><td>21°57'18.48"N</td><td>82°24'32.60"E</td></tr>
<tr><td>V</td><td>21°57'11.49"N</td><td>82°24'14.06"E</td></tr>
<tr><td>VI</td><td>21°57'33.95"N</td><td>82°23'52.47"N</td></tr>
</table>
</td><td></td></tr>
<tr><td>7</td><td>Elevation of the project site</td><td>§ Plant site elevation is 277 – 291m amsl
§ Finished Floor Level of plant area is 273.5 m amsl</td><td></td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>8</td><td>Involvement of Forest land if any.</td><td>Status of stage I Forest Clearance: Not Applicable
Area of the forest land involved: Nil</td><td></td></tr>
<tr><td>9</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td>Project site: Nil within the project site
Study area<table><tr><th>Water Body</th><th>Distance</th><th>Direction</th></tr><tr><td>Upka Nala</td><td>0.6 km</td><td>WNW</td></tr><tr><td>Lilagarh River</td><td>5.1 km</td><td>W</td></tr><tr><td>Arasmeta lake</td><td>6.5 km</td><td>W</td></tr></table>HFL Elevation of Lilagarh River HFL is 243.7 m above MSL as per the letter from Irrigation Dept dt. 06.06.2025
Plant elevation is 271-292 m above MSL</td><td>The distance between River HFL and nearest plant boundary is 5.1-km.</td></tr>
<tr><td>10</td><td>Existence of ESZ/ ESA/national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area</td><td>No Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. within the study area of 10 km.
Reserved and protected forests: There is no RF/PF within the study area and the same has been certified by DFO, Janjgir, Champa vide letter dated 10/04/2008.</td><td></td></tr>
<tr><td>11</td><td>Archaeological sites monuments/ historical temples etc.</td><td>None within 7-km radius & none within impact zone of project
♦Mud Fort Kotagarh at 9.55km in the NNE;
♦Mud Fort at Kotmi, 8.11 km- NNW</td><td></td></tr>
<tr><td>12</td><td>Facility envisaged in CRZ area (Only for coastal power plant)</td><td>Not Applicable</td><td>-</td></tr>
<tr><td>13</td><td>Involvement of Critically Polluted Area/Severely Polluted area as per</td><td>No Involvement of Critically Polluted Area/ Severely Polluted area.</td><td>-</td></tr>
</table>

S. No.	Particulars	Details	Remarks
	2018 CEPI score		

S. No.	Existing power plant configuration and capacity	Proposed power Plant configuration and capacity	Total	Technology adopted*
1	Phase I 3x600 MW (1800 MW)	Phase II 3x600 MW (1800 MW)	3600 MW	**Stage-I:** sub-critical with pulverized Coal firing **Stage-II:** sub-critical with pulverized Coal firing

*Note: * - As per the Ministry of Power O.M. dated 08/02/2018, thermal power projects based on sub-critical Technology, which have either been granted "Environmental Clearances" or been issued 'Terms of Reference (ToR)' by the Central/State Govts. and achieved "zero date/Start date" as defined in CERC Regulations, may be allowed to be commissioned even after the expiry of the 12th plan. In view of this, proposal was considered for grant of fresh EC.*

28.1.11: The details of the fuel (coal/LDO) requirement for the proposed project/ expansion cum proposed project along with its source and mode of transportation is given as below:

Details	Fuel requirement	Source	Distance from site (Kms)	Mode of Transportation	Coal characteristics (Worst case scenario)	Linkage document
Coal						
Existing TPP (3x600 MW)	7.07 million TPA	SECL	65-70	Rail	Ash - (36%) Sulphur - (0.42%) Moisture (11.65%) GCV -3169 Kcal/Kg	SECL and MCL under SHAKTI auction scheme.
		MCL	100-150	Rail		
Proposed TPP (3x600 MW)	7.07 million TPA	CIL	65-150	Rail	Ash - (36%) Sulphur - (0.42%) Moisture (11.65%) GCV -3169 Kcal/Kg	Coal India Limited under SHAKTI Scheme.
LDO						
Existing	2000 KLPA	IOC	200	Road	Flash Point – 6	NA

TPP (3x 600 MW)					0 ^{0}C Density – 953 kg/m3 Sulphur – 0.46% Ash – 0.1% Calorific Value – 10350 gross cal/g	
Proposed TPP (3 x600 MW)	2000 KLPA	IOC	200	Road		

Approval for drawing 100 MCM of water for all 6 units from River Mahanadi has been obtained from Irrigation department, Chhattisgarh state vide letter no 3313/AF4-82/AS-2/31/ /8, Raipur dated 23.06.2008 and 5958/AF4-82/31/AS-2/ /8, Raipur dated 15.10.2009. The water will be transported to the plant site through pipeline.

The specific water consumption of existing operating three units is less than 3.0 cum/MWh and specific water consumption will be maintained at or below 3.0 cum/MWh for all the 6 units.

Period	**March – May, 2024**	**Additional study (if any)**
AAQ parameters at 9 Locations (min and max)	$PM_{2.5}$ = 33.2 To 36.29 µg/m^3 PM_{10} = 57.96 to 64.52 µg/m^3 SO_2 = 12.25 to 13.6 µg/m^3 NOx = 14.35 To 15.78 µg/m^3 CO = 0.18 To 0.22 mg/m^3	
Incremental GLC level	**275-m stack height with NOx Control** PM = 2.003 µg/m^3 (at 1.9 km in SSW Direction) SO_2 = 33.3 µg/m^3 (at 1.9 km in SSW Direction) NOx =6.68 µg/m^3 (at 1.9 km in SSW Direction) 2 stacks of 275-m each with tri flue are existing. Boilers of Unit 1,2 & 3 are connected to one stack and boilers of Unit-4,5 & 6 are connected to another stack. Utilisation of existing stacks without FGD (as per notification dated 11.07.2025) with Hybrid ESP & with NOx control through Low NOx burners and SOFA is proposed.	
Ground water quality at 8 locations	pH: 7.03 to 7.82, Total Hardness: 144 to 426 mg/l, Chlorides: 70.5 to 277 mg/l, Fluoride: 0.4 to 1.1 mg/l, Heavy metals: Fe: 0.03 to 0.15 mg/l, Zn: 0.18 to 0.38 mg/l As: <0.01 mg/l	
Surface water quality at 5 locations	pH: 7.24 to 8.21; DO: 5.2 to 5.6 mg/l; BOD: 7.5 to 8.6 mg/l COD 30 to 40 mg/l; Heavy metals: (Fe): 0.05 to 0.13 mg/l Zn: BDL As: BDL	
Effluent generation details and its	**Industrial Wastewater** •The ZLD system is implemented for treating industrial	

<table>
<tr><th>Period</th><th>March – May, 2024</th><th>Additional study (if any)</th></tr>
<tr><td>treatment</td><td>wastes for all the 6 units. Wastewater Treatment s ystem is in place and is sufficient to treat wastewat er generated (2086 m^3/h) from all Units (6x600 M W)
• Waste water handling system consists of RO plant & UF and common effluent monitoring basin. Out of the total (2086 m^3/h) effluent generated, 922 m^3/h goes to RO & UF whereas the balance 1164 m^3/h goes to common effluent monitoring basin.
• RO generates a permeate of 744 m^3/h which will be re used in Cooling Tower makeup. Whereas RO reje ct of 263 m^3/h will be sent to common monitoring basin and then is (263+1164=1400m^3/h) used for dust suppression, ash handling and miscellaneous uses
<u>Domestic Wastewater</u>
• 450 KLD of domestic effluent generating from operati ng units and it is envisaged that about additional 4 00 KLD of domestic effluent will be generated fro m balance units. The STP of 2x600 KLD is alread y installed
• Entire treated domestic sewage is being used for Gree nbelt / plantation. The treated sewage water qualit y is monitored and the quality meets the CTO con ditions.</td><td></td></tr>
<tr><td>Noise levels Leq (Day and Night)</td><td>48.7 to 53.2 dB(A) for the day time and 40.9 to 43.9 dB(A) for the Night time.</td><td></td></tr>
<tr><td>Traffic assessment study findings</td><td>• Traffic study has been conducted at NH 49 which is approxima tely 2.0 km from the plant site.
• Transportation of coal will be done 100% by rail. In case of exi gency on account of limitations of rake/ Coal India issues, up to 10% of the coal will be transported via Road.
• Existing PCU is 288-1302 PCU/hr on Banahil Jn, Akaltara, Ta rod, and Matusri, and existing level of service (LOS) is:
<table>
<tr><th>Road</th><th>V (Volume in PCU/hr.)</th><th>C (Capacit y in PCU/hr.)</th><th>Existing V/C Ratio</th><th>LOS</th></tr>
<tr><td>Banahil J n</td><td>288</td><td>1500</td><td>0.19</td><td>A</td></tr>
<tr><td>Akaltara</td><td>730</td><td>1500</td><td>0.48</td><td>C</td></tr>
<tr><td>Tarod, N H 200</td><td>2292</td><td>5400</td><td>0.42</td><td>C</td></tr>
<tr><td>Matusri, NH 200</td><td>1302</td><td>5400</td><td>0.24</td><td>B</td></tr>
<tr><th>Road</th><th>V (Volume in PCU/hr.)</th><th>C (Capacit y in PCU/hr.)</th><th>Existing V/C Ratio</th><th>LOS</th></tr>
<tr><td>Banahil J n</td><td>448</td><td>1500</td><td>0.29</td><td>B</td></tr>
</table></td><td></td></tr>
</table>

Period	March – May, 2024	Additional study (if any)
	<table><tr><td>Akaltara</td><td>890</td><td>1500</td><td>0.59</td><td>C</td></tr><tr><td>Tarod, NH 200</td><td>2452</td><td>5400</td><td>0.46</td><td>C</td></tr><tr><td>Matusri, NH 200</td><td>1462</td><td>5400</td><td>0.27</td><td>B</td></tr></table> **Note: Capacity as per IRC-64-1990 Guide line for capacity for roads.* **Conclusion:** The level of service will be B, C, C and B res pectively after including additional traffic due to proposed project.	
Soil Quality at 08 Locations	Bulk density: 1.1 to 1.4 gm/cc; pH range 7.45 to 7.82; Electrical conductivity (EC) 287 to 443 µS/cm; calcium content: 16.3 to 27.6 meq/100; exchangeable sodium: 0.46 to 0.72 meq/100g; exchangeabl e potassium: 0.38 to 0.56 meq/100g; Nitrogen: 67.3 to 84.2 kg/ha; Phosphorous: 84.5 to 126.3 kg/ha; Cation Exchange Capacity (CEC): 34.14 to 47.12 meq/100 g; Magnesium: 15.7 to 25.3 meq/100g; Sulphur: 78.4 to 120.8 mg/kg; Organic Matter: 0.55 to 0.83%	
Flora and fauna	List of Schedule-I flora and endangered Fauna if any: Yes If yes status of site-specific wildlife conservation plan. The following Schedule-I faunal Sps were found in the stu dy area: • *Herpestes edwardsii* • *Vulpes bengalensi* • *Chamaeleo zeylanicus* • *Ptyas mucosa* • *Naja naja* • *Crocodylus palustris* • *Elanus caeruleus*	Wildlife and conservati on plan for schedule I s pecies prepared by Sout hern Enviro Engineers Private Limited, Hydera bad submitted for appro val to PCCF, Raipur (W ild Life) on 08.04.2025
Hydrogeology study	• The power plant and the buffer zone fall in the Mahanadi River basin and is drained by tributaries of Sheonath River especially by Lilagar river in the west of project area and Uttyal, Pawai & Kanji rivers in the east of th e project area. • The drainage density porous & permeable in nature and ar e having medium surface run-off. • The depth to water in buffer zone ranges from 1.00 to 2.8 0 m bgl. during post-monsoon period while it is deepe r ranging from 2.40 to 5.50 m bgl during pre-monsoo n. • Hydraulic conductivity is found in the range of 1 X 10^{-7} t o 1 X 10^{-9} cm/sec and ash ponds are provided with H DPE liner (2-mm) to control seepage and hence leachi ng of heavy metals into groundwater. • Action taken: KMPCL has been monitoring the ground w ater quality around the Ash Dyke area monthly basis • To maintain safety of the bund from slope failures, settle	National Institute of Te chnology Warangal

Period	March – May, 2024	Additional study (if any)
	ment and breaching bunds are regularly monitored an d maintained. Settlement gauges are installed to find a ny safety concerns due to settlement.	
Impact study on bio-diversity and aquatic ecology	Terrestrial Ecology 38 tree species, 19 shrub species, 15 herbs species, 7 grasse s and 9 aquatic plant species were found in the study area As per the primary ecological survey in the study area, the trees & shrubs are medium diverse. Theherbs and grass are highly diverse. No endangered floral sps observed. 7 mammals, 17 Avi fauna, 5 reptiles, 4 amphibians and 5 fi sh sps were found in the study area. 7 Schedul-1 fauna found in the area Aquatic Ecology Diversity of phytoplankton and zooplankton varies betwee n 2.78-3.12 and 2.42-2.64 respectively. Based on the diversity index, this water can be classified as Mesotrophic in nature and slightly enri ched with nutrients.	
Risk assessment Study	Recommendations of Risk assessment report with mitigation measures The preliminary risk assessment has been completed for th e proposed power plant and associated facilities and the br oad conclusions are as follows: • There will be no significant community impacts or envir onmental damage consequences; and • The hazardous event scenarios and risks in general at pro posed plant can be adequately managed to acceptabl e levels by performing the recommended safety stud ies as part of detailed design, applying recommende d control strategies and implementing a Safety Man agement System as practiced in the existing plant Risk Reduction Opportunities • Buildings and plant structures designed for cyclone and s eismic events (where appropriate), • Provision for adequate water capacity to supply fire prot ection systems and critical process water; • Isolate people from load carrying/mechanical handling s ystems, vehicle traffic and storage and stacking loca tions; • Installation of fit-for-purpose access ways and fall protec tion systems to facilitate safe access to fixed and mo bile plant; • Provision and integrity of process tanks, waste holding ta nks and bunded areas as per relevant standards; • Containment of hazardous materials; • Security of facility to prevent unauthorized access to pla nt, introduction of prohibited items, and control of o nsite traffic; and • Development of emergency response management syste ms commensurate with site specific hazards and risk s (fire, explosion, rescue and first aid).	
Marine impact assessment study (Only f	Not Applicable	-

Period	March – May, 2024	Additional study (if any)
or coastal based TPPs)		

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal	Remarks
	Hazardous Waste					
	Waste Oil	Plant	15		Disposal through authorised Recycler	
	Waste /residue containing oil	Plant	3.5		Disposal through authorised Recycler	
	Non hazardous					
	Municipal Solid Waste	Plant	350		Decomposable waste will be vermicomposted. Non-biodegradable waste will be disposed Authorized dealer	

Details of advertisement given	28/03/2025
Date of public consultation	28/03- 29/04/2025
Venue	Not applicable
Presiding Officer	Not applicable
Major issues raised	Employment, Hospital & School, College for Girls, Road Traffic and Coal & Ash Transportation, Clarification on EIA report, and Fulfilling last Public Hearing promises
No. of people attended	26 written representations have been received by Regional Officer, CECB, Bilaspur

Action plan as per MoEF&CC O.M. dated 30/09/2020

Sr. No	Key Area Identification for Activities Based on Public Needs Highlighted During Public Consultation	Proposed Expenditures year wise (Rs. In Lakhs)					Total Proposed Expenditure (Rs. In Lakhs)	Physical Targets
		1st Year	2nd Year	3rd Year	4th Year	5th Year		
A	**Educational Initiatives**							
	College for Girls which boost girl education, Nariyara	100	50	50	50	0	250	1 college building with 10 classrooms, 5 staff rooms, 1 library, 1 computer lab; total ~1500 sqm Target completion by July 2028.
	English Medium High School, Village-Rogda, Village: Taraud	100	50	50	50	0	250	1 school building with 8 classrooms, 4 admin rooms, playground; total ~1200 sqm Target completion by July 2028.
	Vocational training centres	50	35	35	0	0	250	1 training center with 5 labs, 3 classrooms, 2 admin rooms; ~1000 sqm Target completion by July 2028.
	ITI/Public school	50	40	40	0	0		1 ITI/school with 6 classrooms, 4 workshops/labs, 1 office; ~1300 sqm Target completion by July 2028.
		300	**175**	**175**	**100**	**0**	**750**	-
B	**Community Health Initiatives**							
	Health centre at Village: Taraud	50	50	50	0	0	150	1 PHC with 5 rooms (OPD, pharmacy, wards, doctor room, waiting); ~500 sqm Target completion by July 2028.
	Veterinary hospital at Village-Rogda	25	25	0	0	0	50	1 veterinary hospital with 5 rooms (OPD, treatment, medicine store, staff); ~300 sq m Target completion by July 2027
	Full-fledged hospital, Village-Rogda, Village: Taraud	100	100	100	100	100	500	1 full-fledged hospital (20 beds), 15+ rooms (OPD, emergency, maternity, wards, labs, admin); ~2000 sqm. Target completion by July 2029.

Sr. No	Key Area Identification for Activities Based on Public Needs Highlighted During Public Consultation	Proposed Expenditures year wise (Rs. In Lakhs)					Total Proposed Expenditure (Rs. In Lakhs)	Physical Targets
		1st Year	2nd Year	3rd Year	4th Year	5th Year		
		175	**175**	**150**	**100**	**100**	**700**	
C	**Community Rural Infrastructure Development**							
	Infrastructural facilities	100	200	150	0	0	450	10 Solar streets lights in nearby villages (Nariyara, Banahil, Tarod, Rogda, Amora, Murlidih, Pakariya and Latiya) consultation with Gram Panchayat Rural infra: 3 internal roads (1.5 km), 3 water tanks, 4 drainage lines Target completion by July 2028
	Cow Sheds (03) at Nariyara) District -Janjgir-Champa	10	10	0	0	0	20	3 cow sheds (each ~100 sq m), cattle capacity ~50 each Target completion by July 2028.
	Sub Total	**110**	**210**	**150**	**0**	**0**	**470**	
D	**Support for Nature Conservation**							
	Pond Construction, Deeping of pond	60	40	50	50	50	250	the construction of a 3 pond at Rogda Village Deeping and renovation of pond boundary
	Deeping and renovation of pond boundary	50	40	40	0	0	130	
	Sub Total	**110**	**80**	**90**	**50**	**50**	**380**	
	TOTAL						**2300**	

Sl. No.	Description of Item	Existing (Rs. In Crores/lakhs)		Proposed (Rs. In Crores/lakhs)	
		Capital Cost	Recurring Cost	Capital Cost	Recurring Cost
1	**Air Quality Management**				
A	Upgradation of ESP, installation of Dust suppression system in	-	-	370	36

Sl. No.	Description of Item	Existing (Rs. In Crores/lakhs)		Proposed (Rs. In Crores/lakhs)	
		Capital Cost	Recurring Cost	Capital Cost	Recurring Cost
	Limestone and Gypsum storage and handling areas				
B	Low NOx burners, S OFA, other technolog y to meet NOx emissi on norms	-	-	400	0.2
C	Noise enclosures	-	-	10	0.2
2	**Water and Waste water management system**				
A	ETP upgradation	-	-	45	1.0
3	**Hazardous waste management**				
A	Upgradation of Hazar dous shed and other facilities	-	-	2.0	-
4	**Green Belt Develop ment**	-	-	6.2	1.5
5	**Wild Life Conservat ion Plan**			0.4	-
6	**Solar Power**			18	0.55
TOTAL				**851.6**	**39.45**

28.1.17: Existing green belt has been developed in 277 ha area which is about 33.4 % of the total project area of 828.46 ha .7,20,000 plants were planted and 6,47,250 plants have survived (90%) as verified by " Society For Environment & Integrated Development", Raipur (CECB Approved). It is further proposed to plant some more saplings under gap plantation so as to reach 100% survival rate in next 2 years.
In addition, as per the approved ToR, KMPCL has identified 2 Ha of land within the plant premises for raising additional plantation through Miyawaki plantation technique during 2025-26 and 2026-27.
As per the EC condition of EC dated 13.08.2021, addition area of 50-Ha has been identified and green belt will be developed in next 5 years period @ 2500 saplings/Ha.
Year wise plantation plan is as under:
FY 25-26: 5 Ha
FY 26-27: 10 Ha
FY 27-28: 15 Ha
FY 28-29: 10 Ha
FY 29-30: 10 Ha

Year	Quantity generated (MT)	Quantity utilized (MT)	% of Utilization	Balance quantity (MTP)	No of storage silos with capacity

2022-23	24,05,591	24,05,591	100%	0	2x3800 m^3
2023-24	24,55,284	24,55,284	100%	0	
2024-25	24,40,339	20,87,409	86%	3,52,929	

S. No.	Activity (as applicable)	Quantity Utilized, M T	Percentage of F ly Ash utilised w.r.t total fly as h generation	Remarks (Prior approval of SPCB details to be mentioned)
	Fly ash-based products (bricks or blocks or tiles or fiber cement she ets or pipes or boards or panels)	20,188	1%	Prior approval of S PCB in place
		50,235	2%	
		69,814	3 %	
	Cement manufacturing	13,61,096	63%	
		14,95,343	68%	
		12,94,261	59 %	
	Ready mix concrete	2,993	0%	
	Construction of roads, road and fl y over embankment	11,275	1%	
		2,70,536	12%	
		1,07,687	5 %	
	Construction of dams	0	0%	
	Filling up of low-lying area	5,84,406	27%	Prior approval of S PCB in place
		3,34,646	15%	
		1,27,224	6 %	
	Filling of mine voids/stone quarr y:	1,88,067	9%	Prior approval of S PCB in place
		58,996	3%	
		3,22,167	15 %	
	Total	**62,98,934 MT**		

B. **Bottom ash details for last three years**

S. N o.	Activity (as applicable)	Quantity utilis ed	Percentage of total bott om ash	Remarks (Prior approval of SPCB details to b

				e mentioned)
	Construction of roads, road and fl y over embankment	9,116	4%	Prior approval of S PCB
		1,20,645	49%	
		63,552	26%	
	Filling up of low lying area	1,97,397	82%	Prior approval of S PCB
		1,19,036	48%	
		29,471	12%	
	Filling of mine voids	34,046	14%	Prior approval of S PCB
		5,848	2%	
		70,241	29%	
	Total	**6,49,352 MT**		

Stored ash in the active Ash Pond:

S. No.	**Activity (as applicable)**	**Quantity**	**Percentage**	**Remarks (Prior approval of SPCB details to be mentioned)**
	Construction of roads, road and fly over embankment	14,845	5 %	Prior approval of S PCB
	Filling up of low-lying area	1,43,119	47 %	Prior approval of S PCB
	Filling of mine voids	1,47,032	48 %	Prior approval of S PCB
	Total	**3,04,996**	**100%**	

D. Ash Pond details - Existing Ash Dyke

S. No	**Details of Ash pond**	**HCSD Lagoon (Fly Ash Dyke)**	**BA Lagoon 2 (Bottom Ash dyke)**	**Total**
	Status of ash pond (Active/Exhausted, yet to be reclaimed/ Reclaimed)	Active	Active	

S. No	Details of Ash pond	HCSD Lagoon (Fly Ash Dyke)	BA Lagoon 2 (Bottom Ash dyke)	Total
	Area (Ha)	32.5	33.5	66 Ha.
	Dyke height (m)	7.9	11.3	
	Volume (m^3)	13,84,000	46,67,000	
	Quantity of ash disposed (Metric Tons)	2,72,159	80,770	
	Available volume in percentage and quantity of ash can be further disposed (Metric Tons)	22,27841 89%	45,86230 98 %	
	Expected life of ash pond (number of years and months)	Not applicable Active dyke designed for temporary storage	Not applicable Active dyke designed for temporary storage	
	Type lining carried in ash pond: HDPE lining of LDPE Inning or clay Inning or No lining	HDPE lining	HDPE lining	
	Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD)	HCSD	LCSD	
	Ratio of ash: water in slurry mix (1:..)	1:0.538	1:2.3	
	Ash water recycling system (AWRS) installed and functioning: Yes or No	Not available	Not available	
	Quantity of wastewater from ash pond discharged into land or	Nil	Nil	

S. No	Details of Ash pond	HCSD Lagoon (Fly Ash Dyke)	BA Lagoon 2 (Bottom Ash dyke)	Total
	water body (m^3)			
13.	Details regarding dyke stability study and name of the organization who conducted the study.	Detailed ash dyke stability study conducted by NIT Warangal in 2025		

E. Proposed ash utilization plan for expansion project

Year	Estimated Quantity GENERATION (MTPA)			Ash Utilization MTPA	Utilization (%)
	Existing TPP (3 x 600MW)	Proposed TPP (3 x 600 MW)	Total Ash Generation, MTPA		
2025-26	2.80	0	2.80	2.91	118.5
2026-27	2.455	0	2.455	2.91	118.5
2027-28	2.455	0.4	2.855	2.958	103
2028-29	2.455	1.0	3.455	3.455	100
2029-30	2.455	2.3	4.755	4.755	100
2030-31	2.455	2.455	4.91	4.91	100
*** (3x600 MW Unit 1,5 & 6) expected to fully operational by June 2029**					

Ash pond details: No new Ash Pond/ dyke proposed. Existing Ash Pond will be used. Details give in D above

A. Summary of court cases:

- Total 85 cases were filed out of which 28 were disposed.
- Details of the pending 57 cases are as follows:
  - Land related cases: 29
  - Labour and OHC related :1
  - Labour and Minimum wages: 7
  - Income tax related: 5
  - NGT case on fly ash :1
  - Tribunal under coal bearing area:1
  - Debt recovery tribunal, Hyderabad and Chennai: 12
  - EPF cases-1

Details of the one NGT case is as follows:

Sr. No.	Petition/Case/Appeal No.	Description Ongoing Case	Next Date of Hearing	Current Status
1	OA 152 /2016 National Green Tribunal, Bhopal (Central Zone), Sudiep Shrivastava Vs State of Chattisgarh, NHAI & others (KMPCL R-10 formal party)	One Mr. Sudiep Shrivastava filed application before NGT contending that NHAI is constructing two national highways i.e. NH 130 & NH-43 by filling the top layer with red soil instead using Fly ash and is flouting the MoEF notifications in use of fly ash and also NGT guidelines in that regard & for consequential directions.	Next Date Awaited	KMPCL made formal party & no relief sought against it. Appearance made on 12.01.2017. The Petitioner filed an application to implead contractors and was allowed on 27.01.2017. NHAI filed compliance report on 27.01.17. For replies of Respondents. The State had filed letter dt 06.04.17 for convening meeting of all stake holders on 08.06.2017. Matter was posted for report of meeting and directed to produce Minutes of the same was produced by Govt. The last hearing took place on 26/07/17.

B. Summary of Show Cause Notices: Nil
C. Summary of violation: Nil

28.1.20: Compliance to the observations of sub-committee site visit report (Only in case of site visit by the sub-committee) – Nil

28.1.21: Name of the EIA consultant: **M/s Greencindia Consulting(P) Ltd, Ghaziabad**. [S. No. 114. List of ACOs with their **Certificate No.: NABET/EIA/2326/RA 0297 (Valid up to Feb 22, 2026**).

28.1.22: Written submissions

Project proponent submitted the following written submission during the meeting:

S. No.	Queries raised	Reply
	Identification of CPA and non-attainment cities on google map with the distances	• There are no Critically Polluted Areas (CPAs) and non-attainment cities within the 10-km radius of the KMPCL plant area. • The distances of CPA and non-attainment cities is marked in the enclosed map • Locations of CPAs and non-attainment cities identified in lined with the CPCB guideline, dated 25.8.2020 & 16.11.2022 • Both of exiting operating Units - 2,3 & 4 of KMPCL (which have valid EC) and proposed balance under construction Units -1,5 & 6 of KMPCL (for which revalidation of EC is sought) are located within the same premises and do not fall within any CPA nor in any non-attainment cities as per MoEF &CC notification G.S.R. 465(E) dated 11/07/2025. **Hence, it is classified as C-Category project.** A google map showing distance of CPA and Non-attainment cities is submitted.

<table>
<tr><th>S. No.</th><th>Queries raised</th><th>Reply</th></tr>
<tr><td></td><td>Comparison of AAQ between before 2009 and current</td><td>
<table>
<tr><th>Sl. No.</th><th>Parameters</th><th>Baseline Range in Pre-monsoon - 2008, µg/m^3</th><th>Baseline Range in Pre-monsoon 2024, µg/m^3</th></tr>
<tr><td>1</td><td>PM_{10}</td><td>20.1 – 67.8</td><td>48.1 – 65.3</td></tr>
<tr><td>2</td><td>SO_2</td><td>4.1 – 11.5</td><td>9.3 – 13.6</td></tr>
<tr><td>3</td><td>NO_X</td><td>4.6 – 14.2</td><td>11.2 – 16.1</td></tr>
</table>
The comparison of the pre-project and post-project AAQ data reveals that PM10 levels show an improvement whereas the SO_2 & NO_X levels show a very negligible increase which can be attributed to various localised activities.
</td></tr>
<tr><td></td><td>Comparison of biodiversity between before 2009 and current</td><td>
• On comparing the biodiversity study conducted during pre-project stage in 2008 and present status in 2024 indicate that no decline in the species diversity which indicates the effective dust control measures and stable operation of plant.
• The close look into the study reveals that therophytes, hemicryptophytes, Epiphytes have increased the richness from 2008 to 2024.
• Further, it can be observed that, the large tree species were planted to the extent of 7,20,000 nos in the plant site that has changed the species richness which leads to enhanced ecosystem functions, increased biomass production, improved nutrient cycling, and greater stability and resilience to environmental changes.
</td></tr>
<tr><td></td><td>List out the mitigation measures for dust control</td><td>
Additional Mitigation Measures to control the Fugitive Dust
• Gap filling plantation to meet the 100% plantation.
• Installation of sprinklers, wind screens, mobile fogging systems, mist catcher and strengthening the green belt between coal handling & ash handling areas and nearby villages.
• Speed limit of the vehicles passing near to the villages is being monitored and maintained at 15 kmph.
• Exploring the technology to increase the Hybrid ESP performance to improve the dust levels below the 30 mg/Nm^3 (current norm)
</td></tr>
<tr><td></td><td>Sector-wise Fly ash utilization</td><td>
Sector wise fly ash generation for existing/operating units (2,3 & 4) is submitted. Proposed plan for unit 1,5 & 6 ash generation is to channelize into multiple end-use activities. The major utilization route will be by cement manufacturing, accounting for 59–60% of total fly ash generated. Mine void filling (up to 11%) and other utilization for fly such as road construction (19.0 %) & bricks (10 %) and will account for the balance utilisation.
<table>
<tr><th>Sl. No.</th><th>Description</th><th>Per Year (in MT) for Unit- 1,5,6</th><th>% UTILISATION</th></tr>
<tr><td></td><td>Ash generation</td><td>24,55,284</td><td>-</td></tr>
<tr><td>1</td><td>Cement Industry</td><td>14,73,170</td><td>60.0</td></tr>
<tr><td>2</td><td>Brick manufacturing</td><td>2,45,528</td><td>10.0</td></tr>
<tr><td>3</td><td>Road construction</td><td>4,66,504</td><td>19.0</td></tr>
<tr><td>4</td><td>Mines void filling</td><td>2,70,811</td><td>11.0</td></tr>
<tr><td></td><td colspan="2">% Ash Utilization</td><td>100.00</td></tr>
</table>
</td></tr>
<tr><td></td><td>CO and CO_2 measurement</td><td>Source emissions monitoring data for CO & CO_2 is enclosed below. The monitoring is being conducted on regular basis by NAML accredited third party.</td></tr>
<tr><td></td><td>Increase in solar power harnessing</td><td>In addition to proposed roof top solar plant of 4 MW, we will also explore the floating solar plant option in water reservoir to achieve cumulative capacity of 10 MW.</td></tr>
</table>

S. No.	Queries raised	Reply
	Land for the plant	As per the land break-up submitted, the total land extent acquired by KMPCL is 840.92 Ha which is under our possession and converted into industrial use. However, the land utilised for the installation of 6x600 MW TPP is 828.46 ha. and the same has been applied for grant of EC. (EC dated 23/09/2015). The difference in land extent is in possession of KMPCL. Land document which was submitted along with the Part C is submitted.

3.1.3. Deliberations by the committee in previous meetings

N/A

3.1.4. Deliberations by the EAC in current meetings

Observations and deliberation of the EAC

28.1.23: The Committee observed and noted the following:

Recommendations of the Committee:

28.1.24: In view of the foregoing and after detailed deliberations, the committee ***recommended*** the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 **subject to uploading of written submission** on PARIVESH Portal and stipulation of the following specific conditions and general conditions based on project specific requirements:

3.1.5. Recommendation of EAC

Recommended (Subject to submission of requisite information/ documents)

3.1.6. Details of Environment Conditions

3.1.6.1. Specific

[A] Environmental Management	
1.	The project proponent shall abide by all orders and judicial pronouncements, made from time to time by the OA 152 /2016 National Green Tribunal, Bhopal (Central Zone).
2.	Project proponent shall ensure that 100% utilization of ash generated from unit no 1, 5&6 (3x600MW) in accordance with the ash utilization notification dated 31/12/2021 and its subsequent amendment. No additional ash pond is permitted for the proposed expansion and existing ash dyke of 66 Ha shall be utilized for temporary ash disposal as committed.
3.	In addition to the existing 4 Continuous Ambient Air Quality Monitoring Stations (CAAQMS), Project proponent shall install additional one continuous ambient air quality monitoring at suitable locations in and around project site in consultation with CECB within six months from the date of grant of EC.
4.	PP shall obtain amendment in the condition no. xi and xxxvi of the existing EC dated 19/10/2009 and its subsequent amendments as committed within the time frame of three months from the date of grant of expansion EC.

5.	Project proponent shall comply with the recommendations made in the biodiversity assessment report and Hydrogeology report in a time bound manner. Compliance status in this regard shall be submitted to the Regional Office of MoEF&CC along with the six monthly compliance report.
6.	The water requirement for unit no. 1, 5 & 6 is estimated as 8666 m3/hr and the same shall be met from Mahanadi River. The specific water consumption for unit 1,5&6 shall be less than 3.0 m3/MWhr.
7.	The entire coal requirement for 3 units of TPP (3x600 MW) shall be transported by rail network only and no road transportation is permitted except exigency on account of limitations of rake/ Coal India issues, up to 10% of the coal shall be transported via Road.
8.	Project proponent shall store harvested rainwater in the project boundary and utilize the same for plantation, recharging water in the pond and domestic utilization in colonies. A record shall be maintained of water collected through rainwater and its supply system. PP shall get the water audit done every year to optimize the water requirement.
9.	Project proponent shall implement the protective measure proposed in EMP in a time-bound manner. The budget earmarked for the same is Rs. 851.6 crores and should be kept in separate accounts and audited annually. The implementation status along with the amount spent with documentary proof shall be submitted to the concerned Regional Office for the activities carried out during the previous year.
10.	Project proponent shall assess the carbon footprint of the project and develop carbon sink/carbon sequestration resources using modern technologies. The implementation report shall be submitted to the concerned Regional Office of the MoEF&CC.
11.	Project proponent shall ensure that diesel operated vehicles will be switched over to E-Vehicles / CNG vehicles in a time bound manner, replace the passenger vehicles to E/ CNG vehicle in phased manner. Further, for local movement of officials, Contract of Vehicles deployment shall be awarded to Project affected people and all efforts for adopting heavy E-vehicles/ CNG Vehicles like Bulkers for ash transportation for short distance subject to availability of such E-vehicle and adequate charging infrastructure in the surrounding area shall be provided. PP shall submit the action taken report to concerned RO with amount spent, photographs (before & after), number of such non diesel vehicles deployed etc. in six monthly compliance report.
12.	The Project Proponent shall provide stack of 275 meters height and shall abide by the provisions of the notification number G.S.R 465 (E) dated 11/07/2025 related to FGD.
13.	Project proponent shall ensure that pipelines carrying the fly ash and effluent shall be inspected regularly for any leakages.
14.	Effluent of 22128 KLD (922 m3/hr) will be treated through Effluent Treatment Plant. As committed by the Project proponent, Zero liquid discharge shall be adopted for the existing and the proposed plant. No wastewater will be discharged outside the project site.
15.	PP shall implement the concurrent plantation plan in a time bound manner. Total of 277 ha area (33% of total area of 828.46 ha) will be developed as greenbelt. A 5 m - 50 m wide (min 25 m) greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. PP shall also adopt Miyawaki plantation technique and plantation with minimum 2 m height of the saplings in upcoming monsoon season in an area of 2 Ha. In addition, an area of 50-Ha has been identified and green belt will be developed in next 5 years period @ 2500 saplings/Ha. Hence, total area of green belt would be 329 Ha. The budget earmarked for the green belt plantation including Miyawaki Plantation area shall be kept in a separate account and audited annually. PP should annually submit the audited statement of expenditure along with proof of activities viz. photographs (before & after with geo-location date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC and on PARIVESH Portal as the case may be for the activities carried out during previous year.
16.	Project proponent shall carry out community plantation with incentive scheme by distributing 50,000 saplings per year for a period of five years. Further, PP shall provide basic facilities to the nearby schools such as drinking water, sanitation facilities (sanitary napkin vending machines) and shall also develop green belt around the nearby schools. Further, PP shall organize quarterly awareness programs for school students to educate them on the

	significance and preservation of trees.
17.	Wildlife conservation plan as approved by the competent authority shall be implemented. Additional, budget shall be added in the plan, in case additional measures suggested by state wildlife department. The final Wildlife conservation plan duly approved by the CWLW shall be submitted to RO, MoEF&CC within a time frame of three months from the date of grant of EC and the budget approved by the concerned authority shall be deposited in a government account.
18.	Project proponent shall install LED display of air quality (Continuous AAQ monitoring) and stack emission (Continuous emission monitoring) at prominent locations preferably outside the plant's main entrance for public viewing and in administrative complex and maintenance of devices shall be done regularly.
19.	Project proponent shall carry out Water Sprinkling on roads inside the plant area/ administrative/ residential areas and outside the plant area at least for 2 KM on a regular basis to control the air pollution. A logbook shall be maintained for the activity and be in six-monthly compliance report.
20.	PP shall deploy vacuum based vehicle for everyday cleaning of the road in and around plant site at least for 5 KM.
21.	Environment Audit of plant shall be done annually and report shall be submitted to Regional office of the Ministry.
22.	A detailed action plan regarding leachate handling shall be prepared and implemented in consultation with SPCB and the same shall be submitted to the Regional Office of the Ministry. Leachate shall be treated and reused. No treated leachate shall be discharged in any circumstances. Characteristics of Leachate and the treated leachate shall be monitored once in quarter and records shall be maintained.
23.	Oil and grease recovered from the treatment plant should be disposed only through authorized recyclers.
24.	Monitoring of surface water quality and Ground Water quality shall also be regularly conducted in and around the project site and records to be maintained. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall also be undertaken and results/findings submitted along with half yearly monitoring report. The monitored data shall be submitted regularly on PARIVESH portal as part of Half Yearly compliance report.
25.	For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
26.	PP shall ensure that all types of plastic waste generated from the plant shall be stored separately in isolated area and disposed of strictly adhering to the Plastic Waste Management Rules 2016 (as amended). In pursuant to the Ministry's OM dated 18/07/2022. PP shall also create awareness among the people working in the project area as well as in its surrounding area on the ban on Single Use Plastic (SUP) in order to ensure compliance of Ministry's Notification published by the Ministry on 12/08/2021. A report along with photograph on the measures taken shall also be included in the six monthly compliance report submitted by PP.
27.	PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than Green belt development. The action in this regard shall be submitted concerned RO in six monthly report.
[B] Socio-economic	
1.	A vision document comprising prospective plan for implementation of various CER activities, plantation programme outside the project cover area, rejuvenation and conservation of water bodies within 5 km radius of the project cover area shall be prepared and submitted to the Regional Office of the Ministry within 6 months. Implementation status of the same shall be reported to the Regional office in 6 monthly compliance report.

2.	Epidemiological Study among population within 5 km radius of project cover area shall be carried out on regular interval (Once in two year) through independent agency. Necessary measures shall be taken as per findings of study in consultation with district administration. Action taken report shall be submitted to the Regional Office of the Ministry.
3.	The budget proposed for PH is Rs. 23 Crores. The budget proposed shall be kept in a separate account and audited annually. Project proponent shall implement the action plan to address the issues raised during public hearing within a time frame of 3 years from the date of grant of EC. In addition to this, PP shall strengthen the existing Primary Health Center (PHC) & Community Health Center (CHC) in the study area for better public health as committed. Compliance status in this regard shall be submitted along with the six monthly compliance to the concerned Regional Office of MoEF&CC.
4.	The establishment of a robust public grievance redressal mechanism to address concerns and complaints from local communities regarding the power plant's operations, environmental impacts, or social issues shall be developed. A Senior Officer shall review the functioning of the mechanism twice in a month.
[C] Miscellaneous	
1.	An Environmental Cell headed by the Environment Manager with postgraduate qualification in environmental science/environmental engineering, shall be created. It shall be ensured that the Head of the Cell shall directly report to the Head of the Plant who would be accountable for implementation of environmental regulations and social impact improvement/mitigation measures.
2.	Consent for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
3.	All necessary clearance from the concerned Authority, as may be applicable should be obtained prior to commencement of project or activity.

3.1.6.2. Standard

1(d)	**Thermal Power Plants**
Statutory compliance	
1.	Emission Standards for Thermal Power Plants as per Ministry's Notification S.O. 3305(E) dated 7.12.2015, G.S.R.593(E) dated 28.6.2018 and as amended from time to time shall be complied.
2.	Part C of Schedule II of Municipal Solid Wastes Rules, 2016 dated 08.04.2016 as amended from time to time shall be complied for power plants based on Municipal Solid Waste.
3.	MoEF&CC Notifications on Water Consumption vide Notification No. S.O. 3305 (E) dated 07.12.2015 read with G.S.R 593 (E) dated 28.6.2018 as amended from time to time shall be complied
4.	The recommendation from Standing Committee of NBWL under the Wildlife (Protection) Act, 1972 should be obtained, if applicable.
5.	No Objection Certificate from Ministry of Civil Aviation be obtained for installation of requisite chimney height and its siting criteria for height clearance.
Ash content/mode of transporatation of coal	
1.	MoEF&CC Notification issued vide S.O. 1561 (E) dated 21.05.2020 and as amended from time to time shall be complied which inter-alia include use of coal by Thermal Power Plants, without stipulations as regards ash content or distance, shall be permitted subject to compliance of conditions prescribed under (1) Setting Up

	Technology Solution for emission norms, (2) Management of Ash Ponds and (3) Transportation.
Air quality monitoring and Management	
1.	Project proponent shall abide by the provisions of the notification number G.S.R 465(E) dated 11/07/2025 related to FGD.
2.	Low NOX Burners with Over Fire Air (OFA) system shall be installed to achieve NOX emission standard of 100 mg/Nm3.
3.	High efficiency Electrostatic Precipitators (ESPs) shall be installed in each unit to ensure that particulate matter (PM) emission to meet the stipulated standards of 30 mg/Nm3.
4.	Stack with a height of 275 meters shall be provided with continuous online monitoring instruments for SO2, Nox and Particulate Matter as per extant rules.
5.	Exit velocity of flue gases shall not be less than 20-25 m/s. Mercury emissions from stack shall also be monitored periodically.
6.	Continuous Ambient Air Quality monitoring system shall be set up to monitor common/criteria pollutants from the flue gases such as PM10, PM2.5, SO2, NOXwithin the plant area at least at one location. The monitoring of other locations (at least three locations outside the plant area covering upwind and downwind directions at an angle of 120° each) shall be carried out manually.
7.	Adequate dust extraction/suppression system shall be installed in coal handling, ash handling areas and material transfer points to control fugitive emissions.
8.	Appropriate Air Pollution Control measures (DEs/DSs) be provided at all the dust generating sources including sufficient water sprinkling arrangements at various locations viz., roads, excavation sites, crusher plants, transfer points, loading and unloading areas, etc.
Noise pollution and its control measures	
1.	The Ambient Noise levels shall meet the standards prescribed as per the Noise Pollution (Regulation and Control) Rules, 2000.
2.	Persons exposed to high noise generating equipment shall use Personal Protective Equipment (PPE) like earplugs/ear muffs, etc.
3.	Periodical medical examination on hearing loss shall be carried out for all the workers and maintain audiometric record and for treatment of any hearing loss including rotating to non-noisy/less noisy areas.
Human Health Environment	
1.	Bi-annual Health check-up of all the workers is to be conducted. The study shall take into account of chronic exposure to noise which may lead to adverse effects like increase in heart rate and blood pressure, hypertension and peripheral vasoconstriction and thus increased peripheral vascular resistance. Similarly, the study shall also assess the health impacts due to air polluting agents.
2.	Impact of operation of power plant on agricultural crops, large water bodies (as applicable) once in two years by engaging an institute of repute. The study shall also include impact due to heavy metals associated with emission from power plant.
Water quality monitoring and Management	
1.	Induced/Natural draft closed cycle wet cooling system including cooling towers shall be set up with minimum

	Cycles of Concentration (COC) of 5.0 or above for power plants using fresh water to achieve specific water consumption of 3.0 m3/MWhr.
2.	In case of the water withdrawal from river, a minimum flow 15% of the average flow of 120 consecutive leanest days should be maintained for environmental flow whichever is higher, to be released during the lean season after water withdrawal for proposed power plant.
3.	Records pertaining to measurements of daily water withdrawal and river flows (obtained from Irrigation Department/Water Resources Department) immediately upstream and downstream of withdrawal site shall be maintained.
4.	Rainwater harvesting in and around the plant area be taken up to reduce drawl of fresh water. If possible, recharge of groundwater to be undertaken to improve the ground water table in the area.
5.	Regular (at least once in six months) monitoring of groundwater quality in and around the ash pond area including presence of heavy metals (Hg, Cr, As, Pb, etc.) shall be carried out as per CPCB guidelines. Surface water quality monitoring shall be undertaken for major surface water bodies as per the EMP. The data so obtained should be compared with the baseline data so as to ensure that the groundwater and surface water quality is not adversely impacted due to the project & its activities.
6.	The treated effluents emanating from the different processes such as DM plant, boiler blow down, ash pond/dyke, sewage, etc. conforming to the prescribed standards shall be re-circulated and reused. Sludge/ rejects will be disposed in accordance with the Hazardous Waste Management Rules.
7.	Wastewater generation of 22128 KLD (922 m3/hr) from various sources (viz. cooling tower blow down, boiler blow down, wastewater from ash handling, etc) shall be treated to meet the standards of pH: 6.5-8.5; Total Suspended Solids: 100 mg/l; Oil & Grease: 20 mg/l; Copper: 1 mg/l; Iron:1 mg/l; Free Chlorine: 0.5; Zinc: 1.0 mg/l; Total Chromium: 0.2 mg/l; Phosphate: 5.0 mg/l.
8.	Sewage generation of 400 KLD will be treated by setting up Sewage Treatment plant to maintain the treated sewage characteristics of pH: 6.5-9.0; Bio-Chemical Oxygen Demand (BOD): 30 mg/l; Total Suspended Solids: 100 mg/l; Fecal Coliforms (Most Probable Number).
9.	Action plan by the TPPs located within 50 km of a municipality or any Urban Local Body (ULB) to use the treated sewage water produced by the municipality/Urban Local Body(ULB) to reduce fresh water consumption shall be submitted.
Risk Mitigation and Disaster Management	
1.	Adequate safety measures and environmental safeguards shall be provided in the plant area to control spontaneous fires in coal yard, especially during dry and humid season.
2.	Storage facilities for auxiliary liquid fuel such as LDO and HFO/LSHS shall be made as per the extant rules in the plant area in accordance with the directives of Petroleum & Explosives Safety Organisation (PESO). Sulphur Content in the liquid fuel should not exceed 0.5%.
3.	Ergonomic working conditions with First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
4.	Safety management plan based on Risk Assessment shall be prepared to limit the risk exposure to the workers within the plant boundary.
5.	Regular mock drills for on-site emergency management plan and Integrated Emergency Response System shall be developed for all kind of possible disaster situations.
Green belt and Biodiversity conservation	

1.	Green belt shall be developed in an area of 33% of the total plant area with indigenous native tree species in accordance with CPCB guidelines. The green belt shall inter-alia cover an entire periphery of the plant. PP shall also adopt Miyawaki plantation technique and plantation with minimum 2 m height of the saplings in upcoming monsoon season in an area of 2 Ha. In addition, an area of 50-Ha has been identified and green belt will be developed in next 5 years period @ 2500 saplings/Ha. Hence, total area of green belt would be 329 Ha.
2.	In-situ/ex-situ Conservation Plan for the conservation of flora and fauna should be prepared and implemented.
3.	A 3 tier plantation with saplings of native and fruit species of 2 meter height shall be done on both side of the roads which will be used for the transportation of coal and fly ash.
Waste management	
1.	Solid waste management should be planned in accordance with extant Solid Waste Management Rules, 2016.
2.	Toxicity Characteristic Leachate Procedure (TCLP) test shall be conducted for any substance, potential of leaching heavy metals into the surrounding areas as well as into the groundwater.
3.	Ash pond shall be lined with impervious liner as per the soil conditions. Adequate dam/dyke safety measures shall also be implemented to protect the ash dyke from getting breached.
4.	Fly ash shall be collected in dry form and ash generated shall be used in phased manner as per provisions of the Notification on Ash Utilization issued by the Ministry S.O. 5481 dated 31.12.2021, S.O.6169 (E) dated 30.12.2021, S.O.05 (E) dated 01.01.2024 and amendment thereto.
5.	Unutilized ash if any shall be disposed off in the ash pond in the form of High Concentration Slurry method.
Monitoring of compliance	
1.	Environmental Audit of the project be taken up by the third party for preparation of Environmental Statement as per Form-V & Conditions stipulated in the EC and report be submitted to the Ministry.
2.	Resettlement & Rehabilitation Plan as per the extant rules of Govt. of India and respective State Govt. shall be followed, if applicable.
3.	Energy Conservation Plan to be implemented as envisaged in the EIA / EMP report. Renewable Energy Purchase Obligation as set by MoP/State Government shall be met either by establishing renewable energy power plant (such as solar, wind, etc.) or by purchasing Renewable Energy Certificates.
4.	Energy and Water Audit shall be conducted at least once in two years and recommendations arising out of the Report should be followed. A report in this regard shall be submitted to Ministry's Regional Office.
5.	The project proponent shall (Post-EC Monitoring): a. send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government; b. upload the clearance letter on the web site of the company as a part of information to the general public. c. inform the public through advertisement within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forest and Climate Change (MoEF&CC) at http://parviesh.nic.in. d. upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same periodically; e. monitor the criteria pollutants level namely; PM (PM10& PM2.5incase of ambient AAQ), SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company; f. submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF&CC, the

	respective Zonal Office of CPCB and the SPCB; g. submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company; h. inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project and the date of commencement of the land development work.
Corporate Environmental Responsibility (CER) activities	
1.	CER activities will be carried out as per Ministry's OM F.No.22- 65/2017- IA.III dated 30th September, 2020 and 22-65/2017- IA.III dated 25.02.2021 or as proposed by the PP in reference to Public Hearing or as earmarked in the EIA/EMP report along with the detailed scheduled of implementation with appropriate budgeting.

3.2. Agenda Item No 2:

3.2.1. Details of the proposal

"Proposed Expansion of Existing Waste to Energy Plant up to 45 MW", at adjacent DTC Tehkhand Depot, Maa Anandmai Marg, New Delhi-110020 by M/s Tehkhand Waste to Electricity Project Limited by **TEHKHAND WA STE TO ELECTRICITY PROJECT LIMITED** located at **South East,DELHI**			
Proposal For		Fresh ToR	
Proposal No	**File No**	**Submission Date**	**Activity (Schedule Item)**
IA/DL/THE/544398/2025	J-13012/03/2017-IA.I(T)	21/07/2025	Thermal Power Plants (1(d))

3.2.2. Project Salient Features

Agenda No 28.2

28.2 Expansion of Existing 25 MW Waste to Energy (WTE) Plant to 45 MW by **M/s Tehkhand Waste to Electricity Project Limited** located at adjacent DTC Tehkhand, Depot, **Maa Anandmai Marg, District Southeast, New Delhi - Prescribing of Terms of Reference under para 7(ii) a of EIA Notification, 2006 – regarding.**

[Proposal no. IA/DL/THE/544398/2025, F.No. J-13012/03/2017-IA.I(T)]

28.2.1: M/s. Tehkhand Waste To Electricity Waste Project Limited (TWEWPL) has made an application online vide proposal no. IA/DL/THE/544398/2025 dated 21/07/2025 along with the application in prescribed format (CAF, Form – I Part A & B), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at item no. 1(d) Under Category "A" of the schedule of the EIA Notification, 2006 and also attracts general conditions due to proximity to protected area - Okhla Bird Sanctuary ESZ at 4.76 Km NE and Okhla Bird Sanctuary at 4.83 km NE, Asola Wildlife Sanctuary ESZ at 0.72 km SW & Asola Wildlife Sanctuary at 1.65 km SW & inter-state boundaries-Delhi-Haryana State boundary at 1.30 Km SE, and Okhla Industrial Area [Critically polluted area having CEPI score of 92.65] is located at 0.61 km North. Hence, the proposal is considered at Central Level.

28.2.2: The existing 25 MW WTE plant was accorded environmental clearance vide letter no. J-13012/03/2017-IA.I(T) dated 26.07.2018 from MoEF&CC. Public hearing for the project was held on 21/05/2018. Subsequently, EC amendment was accorded on 15.01.2019. Consent to Establish (CTE) was obtained from Delhi Pollution Control Committee (DPCC), vide File No. DPCC/WMC-II/Tehkhand-WTE/2018/3090 dated 31.01.2020 and subsequently renewed up to 25.02.2023. Consent to Operate

(CTO) has been taken from Delhi Pollution Control Committee (DPCC), vide File No. DPCC/WMC-II/Tehkhand-WTE/2018/620-626, dated 07.10.2022 and subsequently renewed up to 06.10.2029.

28.2.3: Implementation status of the EC dated 26/07/2018

S. No.	Configuration	Capacity (MW)	As per the EC dated	Implementation Status as on July 2025	Production as per CTO
1	Product- Power Generation through MSW waste processing 2000 TPD	25	26/07/2018 & 15.01.2019 (Amendment in EC)	The project has been implemented in compliance with the EC conditions and is currently in operation after obtaining all necessary clearances and No Objection Certificates (NOCs) from concerned departments.	25MW

28.2.4: The unit configuration and capacity of existing and proposed project is given as below:

Name of the facility	Unit	Existing	Proposed Expansion*	Total after Expansion Capacity	
Product (Waste to Energy Power)	MW	25	20	45	
Biogas production (by-product)	Nm^3/day or TPD	Nil	Biogas = up to 20,000 Nm^3/day /CBG = up to 8 TPD	Biogas = up to20,000 Nm^3/day /CBG = up to 8 TPD	
Boiler for WTE	TPH	2 x 65	≤100	≤230	

Note*: As per the final EIA report submitted at the time of grant of EC during 26/07/2018 (Proposal No: IA/DL/THE/71979/2017), provision was indicated for future expansion in Figure 2.8 (Site Layout Plan) at Page No. 59 by depicting the third boiler in a grey outline. Instant expansion was envisaged at the time of applying of existing EC itself.

Process description

WTE plant

The technology proposed to be employed for this WTE project is RDF combustion based reciprocating forward feed grate technology. The power plant constitutes Material Recovery Facility (Pre-sorting), RDF fuel Pit, Incinerators, Boilers, and Steam Turbine Generators with power generation capacity of 20 MW.

Bio-gas plant

- Leachate Treatment Plant utilizes chemical and biological treatment methods to treat approximately 360 KL of leachate per day. The plant features three anaerobic digesters operating in both series and parallel modes.
- Anaerobic (without oxygen) biological process that breaks down organic materials and release biogas.
- The Digestion takes about 20 days in the mesophilic temperature (30˚C-35˚C) and producing approx. 8000 to 20,000 Nm3 of biogas per day.
- Anaerobic digestion has four major steps: Hydrolysis, Acidogenesis, Acetogenesis &

Methanogenesis to decompose the organic matter and produce biogas.

- Digested Sludge from the bottom can be used as manure.

CBG production

- Raw biogas will be filtered and cleaned to remove impurities like hydrogen sulphide, moisture, and particulate matter.
- Carbon dioxide and hydrogen sulphide gas will be removed from the biogas using scrubbing and absorption methods.
- The biogas is then enriched to increase the CH4 concentration, typically to 90-95%.
- The scrubbed biogas will be compressed to high pressure (typically 200- 250 bar) and filled into CBG cylinders or will be supplied to gas grid through pipeline.
- The final CBG / Bio-CNG product will meet specified standards for fuel quality, safety, and environmental regulations.

28.2.5: Environmental site settings

<table>
<tr><th>S.No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>1</td><td>Total Land</td><td>6.0703 ha [The complete area is Government land obtained on lease from MCD]</td><td>Land use: The existing Land use of the project site is Industrial. There will be no change in the land use pattern of the site. As per Gazette Notification dated 12.01.2018, the land is already notified for utility purposes by the Delhi Development Authority.
The land was transferred from DDA to MCD and then was handed over to M/s Tehkhand Waste to Electricity Project Limited through a lease deed agreement dated 25.09.2018.</td></tr>
<tr><td>2</td><td>Land use break up</td><td><table><tr><th>Particulars</th><th>Existing (Ha)</th><th>Expansion (Ha)</th><th>Area upon expansion (Ha)</th></tr><tr><td>Covered area</td><td>2.2190</td><td>0.4664 (increased)</td><td>2.6854</td></tr><tr><td>Road area & drainage</td><td>1.0116</td><td>0 (will remain same)</td><td>1.0116</td></tr><tr><td>Green Area (33%)</td><td>2.0142</td><td>0 (will remain same)</td><td>2.0142</td></tr><tr><td>Open Area</td><td>0.8255</td><td>0.4664 (reduced by)</td><td>0.3591</td></tr><tr><td>Total Area</td><td>6.0703</td><td></td><td>6.0703</td></tr></table></td><td>No additional land is required. The proposed expansion will be implemented exclusively on the existing available land, without any reduction to the greenbelt area.</td></tr>
<tr><td>3</td><td>Land</td><td>The land was transferred from DDA to MCD and then w</td><td>Registration No. 5.302</td></tr>
</table>

<table>
<tr><th>S.No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td>acquisition details as per MoEF&CC O.M. dated 7/10/2014 & 20/2/2025</td><td>as handed over to M/s Tehkhand Waste to Electricity Project Limited through a lease deed agreement dated 25.09.2018.</td><td>dated 25.09.2018 and agreement is upto 25 years</td></tr>
<tr><td>4.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Project site: Not applicable
Study Area:
<table>
<tr><th>Name of Habitat</th><th>Distance (Km)</th><th>Direction</th></tr>
<tr><td>Railway Colony</td><td>0.41</td><td>SE</td></tr>
<tr><td>Prem Nagar</td><td>0.48</td><td>SSW</td></tr>
<tr><td>Pul Pehladpur</td><td>1.10</td><td>NNW</td></tr>
<tr><td>Tuglaqabad Village</td><td>1.37</td><td>NW</td></tr>
<tr><td>Tehkhand</td><td>1.39</td><td>NNE</td></tr>
<tr><td>Tuglaqabad Extension</td><td>2.54</td><td>NW</td></tr>
<tr><td>Sarita Vihar</td><td>2.58</td><td>NE</td></tr>
<tr><td>Tajpur Pahari</td><td>2.72</td><td>ESE</td></tr>
<tr><td>Talimabad</td><td>2.76</td><td>WNW</td></tr>
<tr><td>Govindpuri</td><td>3.24</td><td>NNW</td></tr>
<tr><td>Madanpur Khadar</td><td>3.53</td><td>NE</td></tr>
<tr><td>Gupta Colony</td><td>3.79</td><td>SW</td></tr>
<tr><td>Jasola Vihar</td><td>4.19</td><td>NNE</td></tr>
<tr><td>Kalkaji</td><td>4.20</td><td>NNW</td></tr>
<tr><td>Mithapur</td><td>4.28</td><td>ESE</td></tr>
<tr><td>Sarai Khawaja Village</td><td>4.31</td><td>SE</td></tr>
<tr><td>Devli</td><td>4.34</td><td>SW</td></tr>
<tr><td>Sangam Vihar</td><td>4.38</td><td>W</td></tr>
<tr><td>Jaitpur</td><td>4.45</td><td>W</td></tr>
<tr><td>Dakshinpuri</td><td>4.46</td><td>WNW</td></tr>
<tr><td>Dr. Ambedkar Nagar</td><td>4.56</td><td>NW</td></tr>
<tr><td>Khanpur</td><td>4.64</td><td>W</td></tr>
<tr><td>GK II</td><td>4.67</td><td>NW</td></tr>
</table>
The nearest habitation is Tughlakabad Railway Colony 0.</td><td>Status of R&R. Not applicable</td></tr>
</table>

<table>
<tr><th>S.No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>41 km, East. However there is no R & R involved in the s aid project. Hence Not applicable.</td><td></td></tr>
<tr><td>5.</td><td>Existence of sc hool and hospit al if any.</td><td>A. School
<table>
<tr><th>School</th><th>Distance</th><th>Direction</th></tr>
<tr><td>MCD Primary School (BOYS)</td><td>0.49 Km</td><td>SE</td></tr>
<tr><td>Apollo Public School</td><td>0.76 Km</td><td>SW</td></tr>
<tr><td>Government Girls Sen ior Secondary School</td><td>0.79 Km</td><td>ESE</td></tr>
<tr><td>Sky High Modern Sch ool</td><td>0.95 Km</td><td>WNW</td></tr>
<tr><td>MCD Primary School, Railway Colony</td><td>1.07 Km</td><td>ESE</td></tr>
<tr><td>New Sangam Public S chool</td><td>1.19 Km</td><td>W</td></tr>
<tr><td>Nav Jai bharti Public School</td><td>1.39 Km</td><td>SE</td></tr>
<tr><td>Manav Rachna Intern ational School Eros G arden,</td><td>1.43 Km</td><td>SSE</td></tr>
<tr><td>New Motherland Publ ic School</td><td>1.56 Km</td><td>ESE</td></tr>
<tr><td>Govt. Boys Sr. Sec. S chool No 1</td><td>1.67 Km</td><td>E</td></tr>
<tr><td>Bal Upwan Public Sc hool</td><td>1.86 Km</td><td>SE</td></tr>
<tr><td>Ramchander Memoria l Public School</td><td>1.92 Km</td><td>SE</td></tr>
<tr><td>St. Columbus School</td><td>2.19 Km</td><td>SE</td></tr>
<tr><td>Saraswati Vidya Nike tan Public School</td><td>2.39 Km</td><td>SE</td></tr>
<tr><td>Little wings play scho ol</td><td>2.41 Km</td><td>SE</td></tr>
<tr><td>Ashiyan Public Schoo l Faridabad, New Del hi, Haryana 121009</td><td>2.46 Km</td><td>SSE</td></tr>
<tr><td>Kinderzone School</td><td>3.23 Km</td><td>SSE</td></tr>
</table>
B. Hospital
<table>
<tr><th>Hospital</th><th>Distance</th><th>Direction</th></tr>
<tr><td>OKHLA PH-I ESI Ho spital</td><td>0.50 Km</td><td>NNE</td></tr>
<tr><td>MAX Lab</td><td>0.92 Km</td><td>SE</td></tr>
<tr><td>Tuglakabad Railway Health Unit N R Hosp ital</td><td>1.02 Km</td><td>ESE</td></tr>
<tr><td>Western Central Railw ay Hospitals</td><td>1.02 Km</td><td>ESE</td></tr>
<tr><td>Jeewan Jyoti Hospital</td><td>1.21 Km</td><td>NNE</td></tr>
<tr><td>Jain Charitable Hospit</td><td>1.24 Km</td><td>SE</td></tr>
</table></td><td></td></tr>
</table>

<table>
<tr><th>S.No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>al</td><td></td><td></td></tr>
<tr><td>Sarvopari Hospital</td><td>1.56 Km</td><td>SE</td></tr>
<tr><td>Supreme Hospital</td><td>1.98 Km</td><td>SE</td></tr>
<tr><td>BTPS Hospital</td><td>2.03 Km</td><td>East</td></tr>
<tr><td>ECHS Polyclinic Hospital</td><td>2.44 Km</td><td>WNW</td></tr>
<tr><td>Health City Clinic Landmark</td><td>2.70 Km</td><td>ESE</td></tr>
<tr><td>Majeedia Unani Hospital</td><td>2.77 Km</td><td>WNW</td></tr>
<tr><td>Hakeem Abdul Hameed Centenary Hospital</td><td>2.78 Km</td><td>WNW</td></tr>
<tr><td>Unity Hospital</td><td>3.11 Km</td><td>SE</td></tr>
<tr><td>Batra Hospital & Medical Research Centre</td><td>3.35 Km</td><td>WNW</td></tr>
<tr><td>Universal Hospital DND</td><td>3.41 Km</td><td>SE</td></tr>
</table>
</td><td></td></tr>
<tr><td>6.</td><td>Latitude and Longitude of all corners of the project site.</td><td>Plant site
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>28°30'35.37"N</td><td>77°16'50.82"E</td></tr>
<tr><td>B</td><td>28°30'32.41"N</td><td>77°16'56.59"E</td></tr>
<tr><td>C</td><td>28°30'22.99"N</td><td>77°16'51.15"E</td></tr>
<tr><td>D</td><td>28°30'25.49"N</td><td>77°16'44.93"E</td></tr>
</table>
</td><td></td></tr>
<tr><td>7</td><td>Elevation of the project site</td><td>258 meters above mean sea level</td><td></td></tr>
<tr><td>8</td><td>Involvement of Forest land if any</td><td>Status of stage I Forest Clearance: Not applicable
Area of the forest land involved: Nil</td><td>Not applicable</td></tr>
<tr><td>9</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td>Project site: There are no water body within the project site
Study area -The following are within 5km radius from the project site
<table>
<tr><th>Water body</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Pond Near Prem Nagar</td><td>0.51 Km</td><td>West</td></tr>
<tr><td>Pond Near Chugi No 2</td><td>0.57 Km</td><td>SSW</td></tr>
<tr><td>Hari Singh Pond</td><td>0.60 Km</td><td>W</td></tr>
<tr><td>Pond Near Tughlakabad District Park</td><td>1.00 Km</td><td>W</td></tr>
<tr><td>Pond Near Tughlakabad Fort Pond</td><td>1.03 Km</td><td>WSW</td></tr>
<tr><td>Pond Near Tughlakabad</td><td>1.10 Km</td><td>NNW</td></tr>
<tr><td>Pond Near Laal Kuwa</td><td>1.15 Km</td><td>SE</td></tr>
<tr><td>Pond Near Gali No1</td><td>1.39 Km</td><td>SSW</td></tr>
</table>
</td><td></td></tr>
</table>

<table>
<tr><th>S.No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>Drain near Okhala Phase 2</td><td>1.60 Km</td><td>N</td></tr>
<tr><td>Suraj Kund</td><td>2.46 Km</td><td>S</td></tr>
<tr><td>Pond near Kakkurpur</td><td>2.77 Km</td><td>SE</td></tr>
<tr><td>Agra Canal</td><td>2.86 Km</td><td>NE</td></tr>
<tr><td>Gurgaon Canal Feeder</td><td>3.00 Km</td><td>E</td></tr>
<tr><td>Gurukul Lake</td><td>3.34 Km</td><td>SSE</td></tr>
<tr><td>Drain near Khanpur</td><td>4.07 Km</td><td>WNW</td></tr>
<tr><td>Sehatpur Drain</td><td>4.23 Km</td><td>SE</td></tr>
<tr><td>Drain near Abdulfazal Enclave</td><td>4.28 Km</td><td>N</td></tr>
<tr><td>Pond near Mithapur Extension</td><td>4.53 Km</td><td>ESE</td></tr>
<tr><td>Drain near Jasaula Vihar</td><td>4.87 Km</td><td>N</td></tr>
<tr><td>Yamuna River</td><td>4.98 Km</td><td>NE</td></tr>
</table>
</td><td></td></tr>
<tr><td>10</td><td>Archaeological sites monuments/ historical temples etc.</td><td>The following Archaeological Sites are in the radius of 2 km from the project site:
<table>
<tr><th>Name</th><th>Distance Direction</th></tr>
<tr><td>Nai-ka-kot in Tughlaqabad</td><td>0.44 km SW</td></tr>
<tr><td>Walls, gate and bastions of Adilabad (Mohammadabad) and causeway leading there to from Tughlakabad</td><td>1.18 km SW</td></tr>
<tr><td>Tomb of Ghiyasuddin Tughlakabad</td><td>1.76 km West</td></tr>
</table>
</td><td></td></tr>
<tr><td>11</td><td>Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area</td><td>Study area Name & Distance of the ESZ/ESA:
a) Asola Wildlife Sanctuary ESZ is located at 0.72 km SW & Asola Wildlife Sanctuary is located at 1.65 km SW.
b) Okhla Bird Sanctuary ESZ is located at 4.76 Km NE and Okhla Bird Sanctuary is located at 4.83 km NE
Status of Notification:
a) Gazette Notification for ESZ & WLS of Asola Wildlife Sanctuary published in 2017
b) Gazette Notification for ESZ & WLS of Okhla Bird Sanctuary published in 2015
Authenticated map of ESZ projecting distance of ESZ from project site has been submitted.
Status of NBWL approval: Not applicable
List of Reserved and Protected Forests:
<table>
<tr><th>Forest Type</th><th>Name</th><th>Distance & Direc</th></tr>
</table>
</td><td></td></tr>
</table>

S.No.	Particulars	Details	Remarks
		<table><tr><td></td><td></td><td>**tion**</td></tr><tr><td>Reserved Forest</td><td>Jahanpanah City Forest</td><td>2.78 km in WNW</td></tr></table>	
12	Facility envisaged in CRZ area (Only for coastal power plant)	Name of the facility in CRZ area: Nil Recommendations of CZMA: **Not applicable** Status of CRZ clearance: **Not applicable**	-
13	Involvement of Critically Polluted Area/Severely. Polluted area as per 2018 CEPI score	Involvement of CPA/SPA-No (a) Critically Polluted-**Not Applicable** (b) Proximity to CPA - **Okhla Industrial Area is located at 0.61 Km North** [Critically polluted area having CEPI score of 92.65]	Proponent will submit action plan to comply with the additional environmental safeguard as per MoEF&CC O.M. dated 31/10/2019.

28.2.6: The details of the municipal solid waste requirement for the existing project and proposed expansion project along with its source and mode of transportation, is given as below:

Details	Fuel Requirement (MTPA)	Source	Distance from site (Kms)	Mode of transportation	Linkage Document
Existing Wt E	Municipal Solid Waste- 7,30,000	MCD	5-10 Km	Trucks and dumpers	Concession agreement between MCD and TWEPL
Proposed Wt E	Municipal Solid Waste- 3,65,000	MCD	5-10 Km	Trucks and dumpers	

28.2.7: The Existing Water requirement is 490 m^3/day, water requirement is obtained by treated water from Okhla STP and permission for the same has been obtained from Delhi Jal Board vide letter no. F-1/DJB/EE(SDW)V/2017/1346 dated 13.10.2017 The water requirement for the proposed project is estimated as 632 m^3/day, out of which 7 m^3/day, of fresh water requirement will be obtained from the DJB pipeline supply and the remaining requirement of 625 m^3 /day will be met from the treated water from Okhla STP and inhouse treated water. The water will be transported to the plant site through pipelines.

28.2.8: The existing power requirement of 3.5 MW is obtained from Inhouse (WtE Plant). .The power requirement for the proposed project is estimated as 2.8 MW, which will be obtained from the Inhouse (WtE Plant).

28.2.9: The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

Type of Waste	Source	Existing	Expansion	Total	Disposal Method
Recyclable (Ferrous & Non ferrous)	Process	2.5 MT/day (Avg. actual)	1.5 MT/day	4 MT/day	Will be sold to registered recyclers

Type of Waste	Source	Existing	Expansion	Total	Disposal Method
Manure (from composting)	Process	-	2 MT/day	2 MT/day	Used as compost/soil conditioner
Bottom Ash	Process	230 MT/day (Avg. actual)	80 MT/day	310 MT/day	Ash Generated is utilized in road subgrade construction and embankment. Any unutilized material will be sent to SLF* located adjacent to the project site.
Fly Ash	Process	27 MT/day	20 MT/day	47 MT/day	Supplied to ash brick manufacturers and any unutilized material will be sent to SLF* located adjacent to the project site.
Inert	Process	300 MT/day (Avg. actual)	144 MT/day	444 MT/day	Used for road construction and any material will be sent to SLF* located adjacent to the project site.
Used Oil	Machineries	4 MT/year	3 MT /year	7 MT/day	Will be sold to registered recyclers
Domestic Solid Waste	Staff	25 kg/day	7 kg/day	32 kg/day	Will be incinerated in- house boilers

Note: Ash + inert may vary 15 to 26% of the total MSW received.

**** Note – There is a SLF located adjacent to WTE site which is owned by Municipal Corporation of Delhi for which EC was accorded by the Ministry on 29/10/2018. This SLF is an interdependent projects or activities for the proposed WTE expansion as MSW from SLF will be sent to WTE for treatment and waste (ash & inert) from WTE will be sent to SLF for disposal.***

28.2.10: The total cost of the proposed expansion project is estimated Rs. 435 crores. For the existing project, the Environmental Management Plan (EMP) incurred a capital expenditure of Rs. 42.72 crores, and the annual recurring cost of approximately Rs. 5.65 Crores is dedicated towards the environmental protection measures. For the proposed expansion, the estimated capital cost for environmental safeguards is Rs. 1.97 crores, while the annual recurring cost is estimated Rs. 0.34 crores. The employment generation from the proposed project / expansion is 45 nos during the operation phase and 262 workers during the construction phase.

28.2.11: Ash management for the last three years

Type of Waste	Quantity generated (MT)	Quantity utilized (MT)	% of utilization	Balance quantity (MTP)	No. of storage silos with capacity
Bottom Ash	230 MT/day	230 MT/day	100%	0	Nil
Fly Ash	27 MT/day	27 MT/day	100%	0	2x250 m^3

S. No.	Activity (as applicable)	Quantity	Percentage	Remarks (Prior approval of SPCB details to be mentioned)
1	Fly ash based products (bricks or blocks or tiles or fibres cement sheets or pipes or boards or panels)	27 MT/day	100%	Supplied to ash brick manufacturers and any unrecyclable material will be sent to SLF.
	Total	**27 MT/day**	**100%**	**As per guidelines**

ii. Bottom ash generation for the last three years = 83947.5 TPA (Avg. FY 23-24 & 24-25)

S. No.	Activity (as applicable)	Quantity	Percentage	Remarks (Prior approval of SPCB details to be mentioned)
1	Construction of roads, road and fly over embarkment	230 MT/day	100%	As per guidelines
	Total	**230 MT/day**	**100%**	**As per guidelines**

iii. Legacy ash details-Not applicable

iv. Ash Pond details:-Not Applicable

v. Proposed ash utilization plan for expansion project

Details	Existing generation (MTPA)	Proposed generation (MTPA)	Total	Utilization (MTPA)	% of utilization	Balance quantity (MTPA)	No of storage silos with capacity
Bottom Ash	230 MT/day	80 MT/day	310 MT/day	310 MT/day	100%	Nil	Nil
Fly Ash	27 MT/day	20 MT/day	47 MT/day	47 MT/day	100%	Nil	2x250 m3

Ash pond details: If an existing ash pond is to be utilized details may be mentioned. If not, new ash pond details may be provided as below: There is no ash pond in the project. Hence not applicable.

28.2.12: The project's greenbelt, which covers 2.01 hectares and constitutes 33% of the total 6.07 hectare of land area, has been established in accordance with CPCB guidelines. It features a three-tiered periphery with a width of 20-30 meters. The greenbelt includes a total of 6,219 native and local species of saplings and trees. Furthermore, an additional green cover of 0.5 acres (300 No's) has been developed outside the project boundary to create a green curtain.

28.2.13: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration – Nil

28.2.14: Name of the EIA consultant: M/s Perfact Enviro Solutions Pvt. Ltd. (An ISO 9001:2015 & ISO 14001:2015 Certified Company) with their Certificate / Extension Letter No-NABET/EIA/2225/RA 0284 (Rev.01); Valid up to 26.11.2025.

28.2.15: Proposed Terms of Reference (Baseline data collection period: March 2024 to May 2024-

Summer season.

Attributes	Parameters	Sampling		Remarks
		No. of stations	Frequency	
A. Air	-	12	-	
a. Meteorological parameters	Temperature, Wind speed, Wind direction, humidity, rainfall, dry bulb temperature, wet bulb temperature, solar radiation	1	Daily	
b. AAQ parameters	PM_{10}, $PM_{2.5}$,SO_2, NO_2	12	-	
B. Noise	Leq Day time & Leq Night time	12	-	
C. Water	-	12 (@6 ground water & @6 Surface water)	-	
Surface water/Ground water quality parameters	Monitoring for parameters as per drinking water standard IS – 10500 **Ground water quality parameters:** Colour, Odour, Turbidity, Temperature, Conductivity, pH Value, Total Dissolved Solids, Chloride (as Cl), Fluoride (as F), Total Hardness, Alkalinity, Boron, Calcium, Aluminum, Phosphorus, Magnesium (as Mg), Phosphate, Iron, Sulphate (as SO4), Nitrate as NO2 ,Chromium, Arsenic, ,Nickel, Manganese, Sodium (as Na), Copper, Potassium (as K), Cadmium, Lead, Total coliform, faecal coliform **Surface water quality parameters:** Total Carbon, Colour, Odour,Taste, Turbidity, Temperature, Conductivity, pH Value, Total Dissolved Solids, Chloride (as Cl), Fluoride (as F), Total Hardness, Total suspended solids, Calcium (as Ca), Aluminum, Total Phosphorus, Magnesium (as Mg), Iron, Sulphate (as SO4), Nitrate NO3, Chromium, Arsenic as As, Alkalinity CaCO3, Nickel, Sodium (as Na), Copper, Potassium (as K), Cadmium, Copper, Lead, Lithium, Zinc, BOD, COD, DO, Ammoniacal Nitrogen, Total coliform, Faecal Coliform	12 (@6 ground water & @6 Surface water)	-	
D. Land				
a. Soil quality b. Land use	Qualitative and Quantitative Parameters to check soil fertility, Soil Quality Parameters: pH Value, Colour, Moisture content, Organic Matter, Electrical Conductivity, Available Nitrogen, Available Calcium, Available Magnesium, Potassium, Nitrate, Phosphorous Available, Available Chloride, Cation Exchange Capacity, Sulphur, Sodium, Phosphorous (Ortho), Bicarbonate Alkalinity, Texture (with	10	-	

Attributes	Parameters	Sampling		Remarks
		No. of stations	Frequency	
	Percentages of Sand, Silt and Clay), Bulk Density, Porosity.			
E. Biological a. Aquatic b. Terrestrial	The Primary survey of the site was conducted to check the flora and fauna of the core and the buffer area.	-	–	

28.2.16: Justification for considering proposal under para 7(ii) Aof EIA, 2006 (exemption for PH)

Proponent has requested for the waiver off public consultation as per the provisions contained under para 7(ii) a of EIA Notification, 2006 based on the following grounds:

- Proposed expansion of WTE was already envisaged under the proposal submitted for existing EC dated 26/07/2018. As per the final EIA report submitted at the time of grant of EC during 26/07/2018 (Proposal No: IA/DL/THE/71979/2017), provision was indicated for future expansion in Figure 2.8 (Site Layout Plan) at Page No. 59 by depicting the third boiler in a grey outline. Hence, instant expansion was envisaged at the time of applying of existing EC itself.
- Proposed expansion of WTE from 25 to 45 MW will be confined to the existing land of 6.0703 Ha only.
- 6.0703 Ha is already undergone public hearing process as per the provisions contained under EIA Notification, 2006 at the time of grant of EC during 26/07/2018.
- No reduction in green belt area of 2.01 Ha due to the proposed expansion of WTE.
- Proposed expansion will facilitate disposal of additional 1000 tons per day of Municipal Solid Waste.
- State Govt. of Delhi has initiated the neutralization of the waste dump site and the existing project is playing a key role in reducing the waste dumped into landfills by using Municipal Solid waste to generate power.
- Central Pollution Control Board (CPCB) has introduced a new "blue category" to classify industries providing Essential Environmental Services (EES) like waste management and pollution control. This category recognizes activities such as waste-to-energy plants, sewage treatment plants, and landfill maintenance, which are crucial for managing pollution from both domestic and industrial sources.
- Summary of pollution load for existing project vis-à-vis proposed expansion

Emission Load				
S. No.	Pollutant	Existing Load (Kg/hr)	After Expansion Load (Kg/hr)	% Change
1	PM	11.21	14.70	31.2
2	NOx	130.73	171.55	31.2
3	SO2	37.35	49.02	31.2
4	CO	37.35	49.02	31.2
5	Vehicular Emission (kg/day)	0.092	0.009	-90
Water pollution load (Kg/day)				

Parameters	Existing	After Expansion	% Change	Remarks
TSS	1.344	1.98	47.5	Increase
TDS	371.28	547.64	47.5	Increase
COD	4.8	7.08	47.5	Increase
BOD(3 days)	0.984	1.45	47.5	Increase

Waste Generation					
Type of Waste	**Unit**	**Permitted as per EC**	**Total After Expansion**	**% Change**	**Remarks**
Recyclable	MT/day	2	5	150.0	Increase
Manure (from composting)	MT/day	0	2	0.0	Increase
Bottom Ash	MT/day	230	310	34.8	Increase
Fly Ash	MT/day	27	47	74.1	Increase
Inert	MT/day	300	444	48.0	Increase
Domestic Solid Waste	Kg/day	25	32	28.0	Increase

Hazardous waste					
Type of Waste	**Unit**	**Permitted as per EC**	**Total After Expansion**	**% Change**	**Remarks**
Used Oil	MT/year	4	7	75.0	Increase

- Additional mitigation measures to be adopted

Existing Control Measures: There are 2 x 65 TPH (each) capacity of boilers installed at the existing plant, the flue gas from Boilers directed into the turbo-reactor via a venturi nozzle, creating a fluidized bed. The flue gas comes into turbulent contact with hydrated lime and activated carbon, which absorb SO_2, HCl and other acidic compounds, heavy metals, and dioxins & furans.

The remaining dust particles are carried with the flue gas into the baghouse filter through a central duct to chambers. The flue gas passes through filter bags, trapping solids on the outside of the bags, forming a filtration-aiding layer (filter cake). This process ensures the removal of particulate matter.

SNCR technology is installed for the control of NOx emission.

Proposed: The proposed Boiler of up to 100 TPH will be installed as the 3rd boiler with the Best available technology and State-of-the-art technology pollution control devices. The proposed bag filters will be designed with **130% capacity**, providing additional margin for efficient emission control.

B. Measures to be adopted during Construction Phase:

- Regular water sprinkling to mitigate fugitive emissions at the project site.
- Use of Anti-Smog Gun/Fog Cannon for nebulized water spray to control fine dust.
- Transportation of construction material in covered vehicles and proper packing conditions to avoid pollution due to transportation.
- Storing of construction material in covered condition at project site.

- Proper route management of the traffic for smooth ingress and egress of traffic.
- Monitoring of Ambient Air Quality at periodical intervals.
- Continuous Ambient Air Quality Monitoring Station (CAAQMS) already installed.
- Thick Plantation around the plant periphery has been done.
- Strict checking of PUC certificate compliance for all vehicles entering project/plant site
- Plantation of indoor fragrant plants & extensive green belt.

Existing Measures

- The MSW storage pit is maintained under negative pressure. Outside air is allowed to enter the waste storage shed; however, malodorous emissions are not allowed to exit into the atmosphere.
- Odorous emissions containing gases such as methane, mercaptan, hydrogen sulphide, etc., are directed to the boiler furnace, where they are burnt.
- **Tolerant tree species** have been planted to act as natural sinks for pollutants and odour.
- Use of **fragrant agents** in the odour control system through **air-solution spraying methods**.

These measures will remain applicable for the proposed expansion, as the MSW storage pit will remain the same.

Leachate plant emissions will be channelized to the biogas plant, where the CH_4 will be recovered from the biogas. Carbon dioxide (CO_2) and hydrogen sulphide (H_2S) will be removed from the biogas using amine-based scrubbing and absorption methods, these gases directed to the Flue Gas Cleaning System for the treatment and thereafter discharge through chimney.

28.2.17: Written submissions: Proponent made the following written submission during the meeting:

<table>
<tr><th>S. No.</th><th>Query</th><th>Reply</th></tr>
<tr><td>1</td><td>PP shall submit the Revised PPT after removing ranges a nd +- %.</td><td>Revised PPT after removal of ranges & % figures from capacity has b een submitted.</td></tr>
<tr><td>2</td><td>PP shall submit the existing and proposed additional air p ollution control measures an d odour control measures.</td><td>The details of existing and proposed additional air pollution control m easures as mentioned above has been submitted.</td></tr>
<tr><td>3</td><td>PP shall submit a Compariso n of 2018 EIA baseline and c urrent baseline data for both air and water.</td><td>A detailed Comparison of 2018 EIA baseline (December 2017- Februa ry 2018) and current baseline data (March-May 2024) for both air and water has been submitted.</td></tr>
<tr><td>4</td><td>PP shall submit Compliance to Earlier Public Hearing hel d on 21.05.2018.</td><td>Earlier Public Hearing was conducted on 21.05.2018 by Delhi Pollutio n Control Committee (DPCC) under the supervision of Additional Dis trict Magistrate at project site near existing Tehkhand Landfill site/ Bu s depot, Maa Anandmai Marg, Okhla, New Delhi.
Please find below the brief of Public hearing minutes:
▪ Attended by 230 persons
▪ 08 persons expressed their views/queries/suggestions/questions duri ng the public hearing while 57 written suggestion/views slips we re received. However, all the queries were responded by the Proj ect proponent
▪ Overall, the public was happy and welcomed the project for the man agement of solid waste in the area.
▪ Further, it was suggested for adequate control measures to minimize the pollution. Summary of the commitment are given below:
<table>
<tr><td>S. No.</td><td>Activity</td><td>Amount Spent</td><td>Remarks</td></tr>
<tr><td>1</td><td>Noise Pollution</td><td>Approx. 0. 35 lakh</td><td>Regular monitoring</td></tr>
</table>
</td></tr>
</table>

S. No.	Query	Reply
		<table><tr><td></td><td></td><td>s annually</td><td>is being done by approved NABL / MoEFCC laboratory</td></tr><tr><td>2</td><td>Air Pollution</td><td>Rs. 2514 lakhs (Capital Cost) Rs. 424.04 lakhs (recurring for the FY 2023-24 & FY 2024-25)</td><td>2 nos. Flue Gas Cleaning System (Bag Filter), Anti Smog Gun, Water Sprinklers etc.</td></tr><tr><td>3</td><td>Employment for rag pickers</td><td>Rs. 18.95 lakhs (for the FY 2023-24 & FY 2024-25)</td><td>Employment to the rag pickers (7 No's) have been provided in the TWEPL.</td></tr></table>The Public Hearing minutes has been submitted.
5	PP shall submit undertaking of Expansion provision mentioned in earlier EIA.	Undertaking of expansion provisions mentioned in earlier EIA has been submitted.
6	PP shall submit an undertaking that there is no addition in the existing MSW storage pit for the proposed expansion.	An undertaking is attached herewith confirming that there is no addition to the existing MSW storage area for proposed expansion. The existing area and volume of the MSW storage pit has been submitted.
7	PP to suggest Nearby park to be adopted in consultation with MCD for green area development.	Plantation will be undertaken in nearby areas as per the parks/locations allocated by the Municipal Corporation of Delhi (MCD), with a target of planting 5,000 indigenous saplings over a period of three years, in coordination with MCD. Additionally, within the project site, Miyawaki plantation will be implemented in designated areas as per space availability. The undertaking for the same has been submitted.
8	PP shall Improve FGCS and also a modelling study shall be conducted for various stack height and receptors nearby.	The proposed Flue Gas Cleaning System (FGCS) will be designed with 130% capacity, providing an additional margin for efficient emission control. The best available fabric filter materials will be used for the filter bags. A comprehensive modelling study will be conducted for various stack heights for nearby receptors, and the optimised height will be selected to achieve better pollutant dispersal for the proposed expansion.
9	PP shall utilize the third party monitoring reports in addition to the existing baseline data conducted between March to May 2024 for preparation of EIA report.	The third party monitoring reports will be used apart from the already conducted baseline study from March to May 2024.

3.2.3. Deliberations by the committee in previous meetings

N/A

3.2.4. Deliberations by the EAC in current meetings

28.2.18: The Committee observed and noted the following:

i. Instant proposal is for expansion of existing 25 MW Waste to Energy (WTE) Plant up to 45 MW by M/s Tehkhand Waste to Electricity Project Limited located at adjacent DTC Tehkhand, Depot, Maa Anandmai Marg, District Southeast, New Delhi.
ii. The existing project was accorded EC on 26/07/2018 and the same has been implemented.
iii. Proposed expansion is envisaged within the existing land of 6.0703 Ha and no additional land is required for the proposed expansion.
iv. The EAC also took into consideration the drone survey of the project site and KML file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH portal.
v. There is a SLF located adjacent to WTE site which is owned by Municipal Corporation of Delhi for which EC was accorded by the Ministry on 29/10/2018. This SLF is an interdependent projects or activities for the proposed WTE expansion as MSW from SLF will be sent to WTE for treatment and waste (ash & inert) from WTE will be sent to SLF for disposal.
vi. There is no involvement of forest land in the proposed project.
vii. There are three Archaeological Sites within the radius of 2 km from the project site namely Nai-ka-kot in Tughlaqabad; Walls, gate and bastions of Adilabad (Mohammadabad) and causeway leading there to from Tughlakabad and Tomb of Ghiyasuddin Tughlakabad.
viii. Asola Wildlife Sanctuary ESZ is located at 0.72 km SW & Asola Wildlife Sanctuary is located at 1.65 km SW from the project site. Okhla Bird Sanctuary ESZ is located at 4.76 Km NE and Okhla Bird Sanctuary is located at 4.83 km NE from the project site.
ix. The project site is located at distance of 0.61 km from the Okhla Industrial Area which is a Critically Polluted Area (CPA) having CEPI score of 92.65. Proponent is required to submit action plan for additional environmental safeguards as per MoEF&CC O.M. dated 31/10/2019.
x. MSW requirement for the proposed expansion is 1000 TPD and the same would be supplied MCD through trucks and dumpers.

- Proposed expansion of WTE was already envisaged under the proposal submitted for existing EC dated 26/07/2018.
- Proposed expansion of WTE from 25 to 45 MW will be confined to the existing land of 6.0703 Ha only.
- 6.0703 Ha is already undergone public hearing process as per the provisions contained under EIA Notification, 2006 at the time of grant of EC during 26/07/2018.
- No reduction in green belt area of 2.01 Ha due to the proposed expansion of WTE.
- Proposed expansion will facilitate disposal of additional 1000 tons per day of Municipal Solid Waste.
- State Govt. of Delhi has initiated the neutralization of the waste dump site and the existing project is playing a key role in reducing the waste dumped into landfills by using Municipal Solid waste to generate power.
- Central Pollution Control Board (CPCB) has introduced a new "blue category" to classify industries providing Essential Environmental Services (EES) like waste management and pollution control. This category recognizes activities such as waste-to-energy plants, sewage treatment plants, and landfill maintenance, which are crucial for managing pollution from both domestic and industrial sources.
- Increase in pollution load due to the proposed WTE expansion will be minimized by adopting additional environmental safeguards.

In this regard, the member secretary apprised the EC as per the provisions contained under para 7(ii) a of EIA Notification 2006, all applications seeking prior environmental clearance for expansion with increase in the production capacity beyond the capacity for which prior environmental clearance has been granted under this notification shall be made in Form I and they shall be considered by the concerned Expert Appraisal Committee or State Level Expert Appraisal Committee within sixty days, who will decide on the due diligence necessary including preparation of Environment Impact Assessment and public consultations and the application shall be appraised accordingly for grant of environmental clearance.

After deliberating on the above, EAC opined that proposed expansion of WTE project may be exempted from the conduct of fresh public hearing in terms of the provisions contained under para 7(ii)a of EIA, 2006. However, public consultation by obtaining responses in writing from concerned persons having a plausible stake in the environmental aspects of the project or activity shall be carried out as per the procedure prescribed under EIA, 2006.

xv. EAC opined that there should be a site visit by the Sub-committee of EAC to see the various environmental issues pertaining to the instant project before consideration of EC proposal.

xvi. The EAC also deliberated on the written submissions of the project proponent and found it satisfactory.

Recommendations of the Committee:

28.2.19: The EAC after detailed deliberations on the information submitted and as presented during the meeting ***recommended*** the proposal for grant of ToR for conducting an EIA study for the above project **subject to uploading of written submission** on PARIVESH Portal under the provisions of the EIA Notification, 2006, as amended along with the following specific ToR in addition to the generic ToRs.

3.2.5. Recommendation of EAC

Recommended (Subject to submission of requisite information/ documents)

3.2.6. Details of Terms of Reference

3.2.6.1. Specific

[A] Environmental Management and Biodiversity Conservation	
1.	Project proponent shall submit an action plan to comply with the additional environmental safeguards as per MoEF&CC O.M. dated 31/10/2019 shall be submitted as the project site is located at a distance of 0.61 km from the Okhla Industrial Area which is a Critically Polluted Area (CPA).
2.	PP shall obtain No Objection Certificate from Archeological Survey of India for blasting for its impact on Nai-ka-kot in Tughlaqabad; Walls, gate and bastions of Adilabad (Mohammadabad) and Tomb of Ghiyasuddin Tughlakabad.
3.	Project proponent shall submit the authenticated map of Chief Wildlife Warden indicating the distance between the boundary of the project site and Asola Wildlife Sanctuary ESZ , located at 0.72 km SW Asola Wildlife Sanctuary, located at 1.65 km SW, Okhla Bird Sanctuary ESZ located at a distance of 4.76 km NE and Okhla Bird Sanctuary located at 4.83 km NE.
4.	Cumulative Environmental Impact Assessment study of all the existing and proposed project shall be conducted.
5.	Details of characterization of Municipal solid waste, its segregation process and disposal of waste management plan shall be submitted along with EIA.
6.	A plan shall be submitted to minimize the least use of hard plastic getting burn into the incinerators.
7.	Proximate and ultimate analysis, Calorific value of municipal waste proposed to be brought from nearby MSW shall be carried out for design purpose of boilers. Mass balance of waste in the process shall be submitted.
8.	Toxicity Characteristic Leachate Procedure (TCLP) test shall be conducted for Characterization of leachate, any potential of leaching heavy metals into the surrounding areas as well as into the groundwater. TCLP analysis of heavy metals, texture, bulk density, Cation Exchange Capacity of Heavy metals in the flyash and bottom ash shall be conducted for existing plant.

9.	The remedial measures for arresting dust generation on roads and atmosphere, Air pollution control measures including NOx control measure, treatment of leachate and stabilizing the slopes shall be taken up. Implementation plan along with timelines and financial allocations for Scientific and engineered closure of existing landfill shall be submitted.
10.	Detailed Geo-hydrological study shall be conducted w.r.t. hydraulic gradient, porosity and infiltration around 2 km of the project site.
11.	Aquifer characteristics shall be clearly mapped by conducting in-situ studies.
12.	Treatment and disposal of leachate shall be submitted. No water from the plant is allowed to enter into canal/ nallah/ stream.
13.	Details regarding Flue gas treatment, ash generation and its disposal/utilization method shall be submitted.
14.	Monitoring of dioxins and furans and other heavy metals shall also be carried out in the stack emissions as per the Municipal Solid Waste Rules, 2016 for one season for the existing plant.
15.	Impact of existing integrated facility on natural environment be studied and a comparative statement clearly mentioning the impacts on existing water bodies, and other ecologically sensitive areas within 10 km radius of project be submitted.
16.	A comparative chart shall be prepared with changes observed from previous baseline study (existing nearby Waste to Energy Plant) and present baseline study.
17.	An epidemiological study shall be carried out within 5 km range of the existing integrated facility.
18.	Detailed action plan shall be prepared for maintenance of air pollution control equipment.
19.	Pond and ground water quality (10 locations within 2 km radius of the plant boundary) shall be studied and report be submitted along with EIA/EMP. Action plan for Ground water monitoring stations on all hotspots like schools/hospitals within 2 km radius of the plant boundary be submitted.
20.	Baseline Study for Heavy metals in Ground water, Surface water and soil to be carried out and incorporated in EIA/EMP report.
21.	Details pertaining to water source, treatment and discharge should be provided.
22.	Zero Liquid Discharge plan shall be submitted.
23.	Action plan for development of green belt (40% of total project cover area) along the periphery plantation with 90% survival rate and detailed plan for thick plantation in the surrounding Nallah/stream shall be submitted.
24.	PP shall submit action plan for using treated Sewage/Domestic wastewater for its operations.
25.	Project Proponent to conduct Environmental Cost Benefit Analysis for the project in EIA/EMP Report.
26.	An action plan shall be prepared for Water shed development within 10 km radius of the plant boundary in consultation with reputed government institution.

27.	A detailed plan need to be submitted for undertaking extensive green plantation within 10 km radius of the plant focusing on water reservoir, school, hospital and other institutional area and same need to be incorporated in EIA/EMP report.
28.	A detailed action plan of Plantation shall be prepared for nearby areas as per the parks/locations allocated by the Municipal Corporation of Delhi (MCD), with a target of planting 5,000 indigenous saplings over a period of three years, in coordination with MCD. Additionally, within the project site, Miyawaki plantation shall be implemented in designated areas as per space availability.
29.	Recommendations of the Commission for Air Quality Management in National Capital Region and Adjoining Areas shall be submitted.
30.	Comparative statement regarding baseline data collected during Dec 2017 to Feb 2018 & March to May 2024along with the reasons behind the considerable changes in the baseline data shall be furnished.
31.	Action plan for indoor saplings of plants (about 10000) shall be distributed/made available to residents in nearby residential areas. Further, vertical garden/creepers can be erected on the compound wall of premises. The fog cannon can be used to mitigate air pollution within premises of project.
32.	PP is advised to implement the '***Ek Ped Maa Ke Naam***' Campaign, which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than Green belt development. An action plan in this regard shall be submitted.
[B] Disaster Management	
1.	A Disaster Management Plan shall be prepared and incorporated in the EIA/EMP report.
[C] Socio-economic Study	
1.	Public Health Action Plan including the provisions for drinking water supply for the local population shall be in the EIA/EMP Report. The status of the existing medical facilities in the project area shall be discussed. Possibilities of strengthening of existing medical facilities, construction of new medical infrastructure etc. will be explored after assessing the needs of the labour force and local populace.
2.	Proposed expansion of WTE project from 25 to 45 MW is exempted from the conduct of fresh public hearing in terms of the provisions contained under para 7(ii)a of EIA, 2006. However, public consultation by obtaining responses in writing from concerned persons having a plausible stake in the environmental aspects of the project or activity shall be carried out as per the procedure prescribed under EIA, 2006 as amended. As per the Ministry's OM dated 30.09.2020, to address the concern raised during the Public consultation, the Project Proponent is required to submit the detailed activities proposed with year-wise budgetary provision (Capital and recurring) for 5 years. Activities proposed shall be part of EMP. The recommendation Socio-economic study may also be considered while planning the activities & budget.
3.	A need based Social Impact Assessment Study shall also be carried out and an action plan on its recommendations may also be submitted with budgetary provisions.
4.	Demographic details and land use change details in 10 km area shall be submitted.
[D] Miscellaneous	
1.	Plot the wind rose diagram using the typical meteorological year (TMY) data for the period considered for the study. The monitoring units shall be deployed in the field based on the coverage area ratio and direction of the wind. A mathematical model shall be developed for the local site rather than using the standard model available in software for both air & water quality modeling.
2.	PP shall align its activities to one/few of the Sustainable Development Goals (SDG) and start working on the mission of net zero by 2050. PPs shall update the same to the EAC.

3.	PP shall submit the EIA/EMP report after the plagiarism check using authenticated plagiarism software.
4.	Detailed description of all the court cases along with its current status shall be submitted.
5.	PP should provide in the EIA Report details of all the statutory clearances, permissions, no objection certificates, consents etc. obtained for this project under various Acts, Rules and regulations shall be submitted. Further, all the permissions/MoUs obtained for this project shall be revalidated and submitted along with the EIA/EMP report.
6.	The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs, which will analyze the samples.
7.	PP should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations. In addition to this PP should mention the number and designation of persons to be engaged for the implementation of environmental management plan (EMP). The capital and recurring expenditure to be incurred needs to be submitted.
8.	PP should submit the year-wise, activity wise and time-bound budget earmarked for EMP, occupational health surveillance, and activities proposed to address the issues raised during Public Consultation. The capital and recurring expenditure to be incurred needs to be submitted.
9.	The PP should ensure that only NABET-accredited consultants shall be engaged for the preparation of EIA/EMP Reports. PP shall ensure that the accreditation of the consultant is valid during the collection of baseline data, preparation of EIA/EMP report and the appraisal process. The PP and consultant should submit an undertaking the information and data provided in the EIA Report and submitted to the Ministry are factually correct and the PP and consultant are fully accountable for the same.
10.	PP should provide in the EIA Report details of the statutory clearances, permissions, no objection certificates, consents etc. required for this project under various Acts, Rules and regulations and their status or estimated timeline after the grant of EC.
11.	All the certificates viz. involvement of Forestland, distance from the protected area, and list of flora & fauna should be duly authenticated by the Forest Department. The Certificate should bear the name, designation, official seal of the person signing the certificate and dispatch number.
12.	The findings of the subcommittee report shall be incorporated in the final EIA/EMP report.

3.2.6.2. Standard

1(d)	**Thermal Power Plants**
Statutory compliance	
1.	The proposed project shall be given a unique name in consonance with the name submitted to other Government Departments etc. for its better identification and reference.
2.	Vision document specifying prospective long term plan of the project shall be formulated and submitted.
3.	Latest compliance report duly certified by the Regional Office of MoEF&CC for the conditions stipulated in the environmental and CRZ clearances of the previous phase(s) for the expansion projects shall be submitted.
Details of the Project and Site	
1.	The project proponent needs to identify minimum three potential sites based on environmental, ecological and

	economic considerations, and choose one appropriate site having minimum impacts on ecology and environment. A detailed comparison of the sites in this regard shall be submitted.
2.	Executive summary of the project indicating relevant details along with recent photographs of the proposed site (s) shall be provided. Response to the issues raised during Public Hearing and the written representations (if any), along with a time bound Action Plan and budgetary allocations to address the same, shall be provided in a tabular form, against each action proposed.
3.	Harnessing solar power within the premises of the plant particularly at available roof tops and other available areas shall be formulated and for expansion projects, status of implementation shall also be submitted.
4.	The geographical coordinates (WGS 84) of the proposed site (plant boundary), including location of ash pond along with topo sheet (1:50,000 scale) and IRS satellite map of the area, shall be submitted. Elevation of plant site and ash pond with respect to HFL of water body/nallah/River and high tide level from the sea shall be specified, if the site is located in proximity to them.
5.	Layout plan indicating break-up of plant area, ash pond, green belt, infrastructure, roads etc. shall be provided.
6.	Land requirement for the project shall be optimized and in any case not more than what has been specified by CEA from time to time. Item wise break up of land requirement shall be provided.
7.	Present land use (including land class/kism) as per the revenue records and State Govt. records of the proposed site shall be furnished. Information on land to be acquired including coal transportation system, laying of pipeline, ROW, transmission lines etc. shall be specifically submitted. Status of land acquisition and litigation, if any, should be provided.
8.	If the project involves forest land, details of application, including date of application, area applied for, and application registration number, for diversion under FCA and its status should be provided along with copies of relevant documents.
9.	The land acquisition and R&R scheme with a time bound Action Plan should be formulated and addressed in the EIA report.
10.	Satellite imagery and authenticated topo sheet indicating drainage, cropping pattern, water bodies (wetland, river system, stream, nallahs, ponds etc.), location of nearest habitations (villages), creeks, mangroves, rivers, reservoirs etc. in the study area shall be provided.
11.	Topography of the study area supported by toposheet on 1:50,000 scale of Survey of India, along with a large scale map preferably of 1:25,000 scale and the specific information whether the site requires any filling shall be provided. In that case, details of filling, quantity of required fill material; its source, transportation etc. shall be submitted.
Ecology biodiversity and Environment	
1.	A detailed study on land use pattern in the study area shall be carried out including identification of common property resources (such as grazing and community land, water resources etc.) available and Action Plan for its protection and management shall be formulated. If acquisition of grazing land is involved, it shall be ensured that an equal area of grazing land be acquired and developed and detailed plan submitted.
2.	Location of any National Park, Sanctuary, Elephant/Tiger Reserve (existing as well as proposed), migratory routes / wildlife corridor, if any, within 10 km of the project site shall be specified and marked on the map duly authenticated by the Chief Wildlife Warden of the State or an officer authorized by him.
3.	A mineralogical map of the proposed site (including soil type) and information (if available) that the site is not located on potentially mineable mineral deposit shall be submitted.
4.	The water requirement shall be optimized (by adopting measures such as dry fly ash and dry bottom ash disposal

	system, air cooled condenser, concept of zero discharge) and in any case not more than that stipulated by CEA from time to time, to be submitted along with details of source of water and water balance diagram. Details of water balance calculated shall take into account reuse and re- circulation of effluents.
5.	Water body/Nallah (if any) passing across the site should not be disturbed as far as possible. In case any Nallah / drain is proposed to be diverted, it shall be ensured that the diversion does not disturb the natural drainage pattern of the area. Details of proposed diversion shall be furnished duly approved by the concerned Department of the State.
6.	It shall also be ensured that a minimum of 500 m distance of plant boundary is kept from the HFL of river system / streams etc. and the boundary of site should also be located 500 m away from railway track and National Highways.
7.	Hydro-geological study of the area shall be carried out through an institute/ organization of repute to assess the impact on ground and surface water regimes. Specific mitigation measures shall be spelt out and time bound Action Plan for its implementation shall be submitted
8.	Detailed Studies on the impacts of the ecology including fisheries of the River/Estuary/Sea due to the proposed withdrawal of water / discharge of treated wastewater into the River/Sea etc shall be carried out and submitted along with the EIA Report. In case of requirement of marine impact assessment study, the location of intake and outfall shall be clearly specified along with depth of water drawl and discharge into open sea.
9.	Source of water and its sustainability even in lean season shall be provided along with details of ecological impacts arising out of withdrawal of water and taking into account inter-state shares (if any). Information on other competing sources downstream of the proposed project and commitment regarding availability of requisite quantity of water from the Competent Authority shall be provided along with letter / document stating firm allocation of water.
10.	Detailed plan for rainwater harvesting and its proposed utilization in the plant shall be furnished.In addition, wherever ground water is drawn, PP shall submit detailed plan of Water charging activity to be undertaken.
11.	Feasibility of near zero discharge concept shall be critically examined and its details submitted.
12.	Optimization of Cycles of Concentration (COC) along with other water conservation measures in the project shall be specified.
13.	Plan for recirculation of ash pond water and its implementation shall be submitted.
14.	Detailed plan for conducting monitoring of water quality regularly with proper maintenance of records shall be formulated. Detail of methodology and identification of monitoring points (between the plant and drainage in the direction of flow of surface / ground water) shall be submitted. It shall be ensured that parameter to be monitored also include heavy metals. A provision for long-term monitoring of ground water table using Piezometer shall be incorporated in EIA, particularly from the study area.
15.	Hazards Characterization: Past incidents of hazard events within 10km radius of project area with detailed analysis of causes and probability of reoccurrence
Environmental Baseline study and mitigation measures	
1.	One complete season (critical season) site specific meteorological and AAQ data (except monsoon season) as per latest MoEF&CC Notification shall be collected along with past three year's meteorological data for that particular season for wins speed analysisand the dates of monitoring shall be recorded. The parameters to be covered for AAQ shall include PM10, PM2.5, SO2, NOx, CO and Hg. The location of the monitoring stations should be so decided so as to take into consideration the upwind direction, pre-dominant downwind direction, other dominant directions, habitation and sensitive receptors. There should be at least one monitoring station each in the upwind and in the pre - dominant downwind direction at a location where maximum ground level

	concentration is likely to occur.
2.	In case of expansion project, air quality monitoring data of 104 observations a year for relevant parameters at air quality monitoring stations as identified/stipulated shall be submitted to assess for compliance of AAQ Standards (annual average as well as 24 hrs).
3.	A list of industries existing and proposed in the study area shall be furnished.
4.	Cumulative impacts of all sources of emissions including handling and transportation of existing and proposed projects on the environment of the area shall be assessed in detail. Details of the Model used and the input data used for modelling shall also be provided. The air quality contours should be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any. The windrose and isopleths should also be shown on the location map. The cumulative study should also include impacts on water, soil and socio-economics.
5.	Radio activity and heavy metal contents of coal to be sourced shall be examined and submitted along with laboratory reports.
6.	Fuel analysis shall be provided. Details of auxiliary fuel, if any, including its quantity, quality, storage etc should also be furnished.
7.	Quantity of fuel required, its source and characteristics and documentary evidence to substantiate confirmed fuel linkage shall be furnished. The Ministry's Notification dated 02.01.2014 regarding ash content in coal shall be complied. For the expansion projects, the compliance of the existing units to the said Notification shall also be submitted
8.	Details of transportation of fuel from the source (including port handling) to the proposed plant and its impact on ambient AAQ shall be suitably assessed and submitted. If transportation entails a long distance it shall be ensured that rail transportation to the site shall be first assessed. Wagon loading at source shall preferably be through silo/conveyor belt.
9.	For proposals based on imported coal, inland transportation and port handling and rail movement shall be examined and details furnished. The approval of the Port and Rail Authorities shall be submitted.
10.	Details regarding infrastructure facilities such as sanitation, fuel, restrooms, medical facilities, safety during construction phase etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase should be adequately catered for and details furnished.
Environmental Management Plan	
1.	EMP to mitigate the adverse impacts due to the project along with item - wise cost of its implementation in a time bound manner shall be specified.
2.	A Disaster Management Plan (DMP) along with risk assessment study including fire and explosion issues due to storage and use of fuel should be prepared. It should take into account the maximum inventory of storage at site at any point of time. The risk contours should be plotted on the plant layout map clearly showing which of the proposed activities would be affected in case of an accident taking place. Based on the same, proposed safeguard measures should be provided. Measures to guard against fire hazards should also be invariably provided. Provision for mock drills shall be suitably incorporated to check the efficiency of the plans drawn.
3.	The DMP so formulated shall include measures against likely Fires/Tsunami/Cyclones/Storm Surges/ Earthquakes etc, as applicable. It shall be ensured that DMP consists of both On-site and Off-site plans, complete with details of containing likely disaster and shall specifically mention personnel identified for the task. Smaller version of the plan for different possible disasters shall be prepared both in English and local languages and circulated widely.
4.	Details of fly ash utilization plan as per the latest fly ash Utilization Notification of GOI along with firm agreements / MoU with contracting parties including other usages etc. shall be submitted. The plan shall also include disposal method / mechanism of bottom ash along with monitoring mechanism.

Green belt development	
1.	Detailed scheme for raising green belt of native species of appropriate width (50 to 100 m) and consisting of at least 3 tiers around plant boundary not less than 2000 tree per ha with survival rate of more than 85%shall be submitted. Photographic evidence must be created and submitted periodically including NRSA reports in case of expansion projects. A shrub layer beneath tree layer would serve as an effective sieve for dust and sink for CO2 and other gaseous pollutants and hence a stratified green belt should be developed.
2.	Over and above the green belt, as carbon sink, plan for additional plantation shall be drawn by identifying blocks of degraded forests, in close consultation with the District Forests Department. In pursuance to this the project proponent shall formulate time bound Action Plans along with financial allocation and shall submit status of implementation to the Ministry every six months
Socio-economic activities	
1.	Socio-economic study of the study area comprising of 10 km from the plant site shall be carried out through a reputed institute / agency which shall consist of detail assessment of the impact on livelihood of the local communities.
2.	Action Plan for identification of local employable youth for training in skills, relevant to the project, for eventual employment in the project itself shall be formulated and numbers specified during construction & operation phases of the Project.
3.	If the area has tribal population, it shall be ensured that the rights of tribals are well protected. The project proponent shall accordingly identify tribal issues under various provisions of the law of the land.
4.	A detailed CER plan along with activities wise break up of financial commitment shall be prepared in terms of the provisions OM No. 22-65/2017-IA.III dated 30.09.2020.CER component shall be identified considering need based assessment study and Public Hearing issues. Sustainable income generating measures which can help in upliftment of affected section of society, which is consistent with the traditional skills of the people shall be identified.
5.	While formulating CER schemes it shall be ensured that an in-built monitoring mechanism for the schemes identified are in place and mechanism for conducting annual social audit from the nearest government institute of repute in the region shall be prepared. The project proponent shall also provide Action Plan for the status of implementation of the scheme from time to time and dovetail the same with any Govt. scheme(s). CERdetails done in the past should be clearly spelt out in case of expansion projects.
6.	R&R plan, as applicable, shall be formulated wherein mechanism for protecting the rights and livelihood of the people in the region who are likely to be impacted, is taken into consideration. R&R plan shall be formulated after a detailed census of population based on socio economic surveys who were dependant on land falling in the project, as well as, population who were dependant on land not owned by them.
7.	Assessment of occupational health and endemic diseases of environmental origin in the study area shall be carried out and Action Plan to mitigate the same shall be prepared.
8.	Occupational health and safety measures for the workers including identification of work related health hazards shall be formulated. The company shall engage full time qualified doctors who are trained in occupational health. Health monitoring of the workers shall be conducted at periodic intervals and health records maintained. Awareness programme for workers due to likely adverse impact on their health due to working in non-conducive environment shall be carried out and precautionary measures like use of personal equipments etc. shall be provided. Review of impact of various health measures undertaken at intervals of two to three years shall be conducted with an excellent follow up plan of action wherever required.
Corporate Environment Policy	
1.	Does the company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.

2.	Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
3.	What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions. Details of this system may be given.
4.	Does the company has compliance management system in place wherein compliance status along with compliances / violations of environmental norms are reported to the CMD and the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA report.
Miscellaneous	
1.	All the above details should be adequately brought out in the EIA report and in the presentation to the Committee.
2.	Details of litigation pending or otherwise with respect to project in any Court, Tribunal etc. shall invariably be furnished.
3.	In case any dismantling of old plants are envisaged, the planned land use & land reclamation of dismantled area to be furnished.
Additional TOR for Coastal Based Thermal Power Plants Projects (TPPs)	
1.	Low lying areas fulfilling the definition wetland as per Ramsar Convention shall be identified and clearly demarcated w.r.t the proposed site.
2.	If the site includes or is located close to marshy areas and backwaters, these areas must be excluded from the site and the project boundary should be away from the CRZ line. Authenticated CRZ map from any of the authorized agencies shall be submitted.
3.	The soil levelling should be minimum with no or minimal disturbance to the natural drainage of the area. If the minor canals (if any) have to be diverted, the design for diversion should be such that the diverted canals not only drains the plant area but also collect the volume of flood water from the surrounding areas and discharge into marshy areas/major canals that enter into creek. Major canals should not be altered but their embankments should be strengthened and desilted.
4.	Additional soil required for levelling of the sites should as far as possible be generated within the site itself in such a manner that the natural drainage system of the area is protected and improved.
5.	Marshy areas which hold large quantities of flood water to be identified and shall not be disturbed.
6.	No waste should be discharged into Creek, Canal systems, Backwaters, Marshy areas and seas without appropriate treatment. Wherever feasible, the outfall should be first treated in a Guard Pond and then only discharged into deep sea (10 to 15 m depth). Similarly, the Intake should be from deep sea to avoid aggregation of fish and in no case shall be from the estuarine zone. The brine that comes out from Desalinization Plants (if any) should not be discharged into sea without adequate dilution.
7.	Mangrove conservation and regeneration plan shall be formulated and Action Plan with details of time bound implementation shall be specified, if mangroves are present in Study Area.
8.	A common Green Endowment Fund should be created by the project proponents out of EMP budgets. The interest earned out of it should be used for the development and management of green cover of the area.
9.	Impact on fisheries at various socio economic level shall be assessed.
1	An endowment Fishermen Welfare Fund should be created out of CER grants not only to enhance their quality of

0.	life by creation of facilities for Fish Landing Platforms / Fishing Harbour / cold storage, but also to provide relief in case of emergency situations such as missing of fishermen on duty due to rough seas, tropical cyclones and storms etc.
11.	Tsunami Emergency Management Plan shall be prepared wherever applicable and Plan submitted prior to the commencement of construction work.
12.	There should not be any contamination of soil, ground and surface waters (canals & village pond) with sea water in and around the project sites. In other words necessary preventive measures for spillage from pipelines, such as lining of Guard Pond used for the treatment of outfall before discharging into the sea and surface RCC channels along the pipelines of outfall and intake should be adopted. This is just because the areas around the projects boundaries could be fertile agricultural land used for paddy cultivation.

3.3. Agenda Item No 3:

3.3.1. Details of the proposal

Expansion of Lara Super Thermal Power Project from 3200 MW [Stage-I (2x800 MW) & Stage-II (2x800 MW)] to 4800 MW by adding two units of 800 MW under Lara Super Thermal Power Project, Stage-III (2x800 MW) a t Villages Armuda, Chhapora, Bodajhariya, Mahloi, Riyapalli, Kandagarh. Devalpura, Ghutkupali, Thengapali, Lara in Tehsil Pussore, District Raigarh and Village Saradih in Tehsil Dabhara, District Sakti, Chhattisgarh. by **NTPC LIMITED** located at **RAIGARH,CHHATTISGARH**

Proposal For		Fresh ToR	
Proposal No	**File No**	**Submission Date**	**Activity (Schedule Item)**
IA/CG/THE/543085/2025	J-13012/11/2018-IA.I (T)	18/07/2025	Thermal Power Plants (1(d))

3.3.2. Project Salient Features

Agenda No. 28.3

28.3 Expansion of Lara Super Thermal Power Project from 3200 MW [Stage-I (2x800 MW) & Stage-II (2x800 MW)] to 4800 MW by adding two units of 800 MW under Lara Super Thermal Power Project, Stage-III (2x800 MW) by **M/s NTPC Limited** located **at Villages Armuda, Chhapora, Bodajhariya, Mahloi, Riyapalli, Kandagarh. Devalpura, Ghutkupali, Thengapali, Lara in Tehsil Pussore, District Raigarh and Village Saradih in Tehsil Dabhara, District Sakti, Chhattisgarh – Prescribing of Terms of Reference – regarding.**

[Proposal No. IA/CG/THE/543085/2025, F.No. J-13012/11/2018-IA. I (T)]

28.3.1: M/s. NTPC Limited has made an application online vide proposal no IA/CG/THE/543085/2025 dated 28.06.2025 along with the application in prescribed format (CAF, Form-1 Part A & B), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at item no. 1(d) – Thermal Power Plants under Category 'A' of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Name of the EIA consultant: MITCON Consultancy and Engineering Services Ltd., Shivajinagar, Pune – 411005 [S. No. 142 List of ACOs with their Certificate/Extension Letter no NABET/EIA/24-27/RA 0343 Valid up to 05.02.2027].

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

28.3.2: The existing "2x800 MW Coal Based Lara Super Thermal Power Project" was accorded environmental clearance vide file.no J 13012/79/2007-IA. II(T) dated 13.12.2012 from MOEF&CC. Consent to Operate for the existing unit was accorded by Chhattisgarh Environment Conservation Board, Raipur, (C.G.) vide No 1109/TS/CECB/2025 dated 29.04.2025. The validity of CTO is up to 30.04.2026. "2x800 MW (Expansion, Stage-II) Coal Based Lara Super Thermal Power Project" was accorded environmental clearance vide EC ID No EC23A0601CG5636268E dated 17.07.2023 from MOEF&CC and the same is under construction. Consent to Establish for the existing units of Stage-II was accorded by Chhattisgarh Environment Conservation Board, Raipur, (C.G.) vide

No 3168/TS/CECB/2024 dated 12.07.2024. The validity of CTE is up to 11.07.2029.

28.3.3: Implementation status of the existing EC dated 13/12/2012 & 17/07/2023

S. No.	Configuration	Capacity (MW)	As per EC dated	Implementation	Production
1.	Stage-I: 2x800 MW	(1600 MW)	13.12.2012	Under Operation	
2.	Stage-II: 2x800 MW	(1600 MW)	17.07.2023	Under Construction	1600 MW

28.3.4: Environmental site settings

<table>
<tr><th>S. No</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>1.</td><td>Total land</td><td>1227.88 ha [Private: 1031.42 ha; Govt.: 33.35 ha; and Forest:163.11 ha;]</td><td>Land use: Industrial, Agriculture & Forest</td></tr>
<tr><td>2.</td><td>Land use break up</td><td>
<table>
<tr><th>S.N.</th><th>Description</th><th>Stage-I (Ha)</th><th>Stage-II (Ha)</th><th>Stage-III (Ha)</th><th>Total (Ha)</th></tr>
<tr><td>1</td><td>Main Plant</td><td>157.89</td><td>107.69</td><td>71.66</td><td>337.24</td></tr>
<tr><td>2</td><td>Ash Dyke</td><td>168.02</td><td>0.00</td><td>125.00</td><td>293.02</td></tr>
<tr><td></td><td>Sub Total (Plant & Ash Dyke)</td><td>325.91</td><td>107.69</td><td>196.66</td><td>630.26</td></tr>
<tr><td>3</td><td>Green Belt</td><td>90.88</td><td>12.71</td><td>103.44</td><td>207.03</td></tr>
<tr><td></td><td>Green Belt (%) of Main Plant & Ash Dyke Area</td><td>27.88</td><td>11.80</td><td>52.60</td><td>33.00</td></tr>
<tr><td>4</td><td>Reservoir</td><td>54.66</td><td>23.89</td><td>0.00</td><td>78.55</td></tr>
<tr><td>5</td><td>Township</td><td>61.13</td><td>0.00</td><td>0.00</td><td>61.13</td></tr>
<tr><td>6</td><td></td><td>49.8</td><td>16.32</td><td>4.34</td><td>70.46</td></tr>
<tr><td>7</td><td>Ash Corridors</td><td>21.39</td><td>0.00</td><td>0.00</td><td>21.39</td></tr>
<tr><td>8</td><td>Rly Siding</td><td>31.17</td><td>6.62</td><td>2.23</td><td>40.02</td></tr>
<tr><td>9</td><td>Make-up water PH Area</td><td>2.85</td><td>0.00</td><td>0.00</td><td>2.85</td></tr>
<tr><td>10</td><td>Ash Brick Plant</td><td>0.00</td><td>0.00</td><td>2.83</td><td>2.83</td></tr>
<tr><td></td><td>Total Project land (except green Belt in Ha)</td><td>546.91</td><td>154.52</td><td>206.06</td><td>907.49</td></tr>
<tr><td>11</td><td>Green belt outside plant(NTPC acquired land)</td><td>0.00</td><td>87.04</td><td>26.32</td><td>113.36</td></tr>
<tr><td></td><td>Total (Ha)</td><td>637.79</td><td>254.27</td><td>335.82</td><td>1227.88</td></tr>
</table>
Note: The green belt on 207.03 Ha will be developed inside the plant boundary i.e: 33 % of the Main Plant and Ash Dyke area. Green belt of 320.39 Ha inside and outside of plant on NTPC acquired land accounting to 35.3 % of the total project land.
</td><td></td></tr>
<tr><td></td><td>Land acquisition details as per Mo EF&CC O.M. dated 7/10/2014</td><td>Total 1039.09 Ha of land was acquired. [Pvt: 815.26 ha (Perpetual Leasehold Right of NTPC-Lara :811.381 Ha and full Ownership Right of NTPC - Lara: 03.926 ha), Govt: 72.26 ha (Government Land 72.26 Transferred in favour of NTPC- Lara) & Forest:151.76 ha (Diversion of Forest Land for Lara STPP) and 4.02 Ha land is in under land acquisition process.
In addition to above 225.66 Ha of land (Pvt:212.32 ha, Govt:1.99 ha & Forest:11.35 ha) shall be acquired for Ash Dyke, Ash Pipe & Road Corridor and Green belt corridor.
(Govt Land of 40.89 ha was handed over to respective village as CPR Land).</td><td></td></tr>
</table>

<table>
<tr><th>S. No</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td>Existence of habitation & involvement of R&R, if any.</td><td>Project site: No habitation
Study Area:
<table>
<tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Lohakhan</td><td>0.25 Km</td><td>W</td></tr>
<tr><td>Chhapora</td><td>0.3 Km</td><td>N</td></tr>
<tr><td>Mehloi</td><td>0.5 Km</td><td>NW</td></tr>
<tr><td>Dewalsura</td><td>0.5 Km</td><td>W</td></tr>
<tr><td>Charpali</td><td>1.5 Km</td><td>E</td></tr>
<tr><td>Rengalpali</td><td>1.30 Km</td><td>NE</td></tr>
<tr><td>Darripali</td><td>1.68 Km</td><td>W</td></tr>
<tr><td>Ghutakupali</td><td>1.83 Km</td><td>NW</td></tr>
<tr><td>Kodpali</td><td>1.88 Km</td><td>SW</td></tr>
<tr><td>Thengapali</td><td>1.91 Km</td><td>N</td></tr>
<tr><td>Pussore</td><td>5.15 m</td><td>W</td></tr>
</table>
Protective measures adopted are as follows:
•Dedicated plant approach roads avoiding villages.
•Covered trucks and speed control within 25 km/h Warning signage near village road junctions.
•Periodic health check-up camps in villages.
•Distribution of masks during peak construction Supply of treated drinking water
•Livelihood enhancement programs (skill training, vendor inclusion)
•Preference to local employment
•Community development under CSR
•Village-level grievance cell
•Monthly community interaction meetings
•Toll-free helpline and grievance log
•Acoustic enclosures for turbines and DG sets.
•Construction limited to daytime hours near habitations.
•Plantation buffers along plant boundary
•Zero Liquid Discharge (ZLD) policy
•Lined drains and leak-proof ash slurry pipelines</td><td>No R&R issue</td></tr>
<tr><td></td><td>Existence of school and hospitals if any.</td><td>A. School
Project site: Gurukul International
Study Area:
<table>
<tr><th>School</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Deolsura</td><td>0.5 Km</td><td>W</td></tr>
<tr><td>Riyapali</td><td>0.5 Km</td><td>N</td></tr>
<tr><td>Kasaipali</td><td>0.6 Km</td><td>N</td></tr>
<tr><td>Chhapora</td><td>0.5 Km</td><td>N</td></tr>
<tr><td>Mehloi</td><td>0.7 Km</td><td>NW</td></tr>
<tr><td>Bodajhariya</td><td>0.38 Km</td><td>E</td></tr>
<tr><td>Netnagar</td><td>2.1 Km</td><td>NE</td></tr>
</table>
Protective measures adopted are as follows:</td><td></td></tr>
</table>

<table>
<tr><th>S. No</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>• Air and Noise Control: Dust suppression, greenbelt development, and acoustic barriers will be implemented; high-noise activities will be limited to non-school hours.
• Safe Access: Signage, speed breakers, and crossing guards will be provided; heavy vehicle movement near schools will be restricted during school timings.
• Health & Awareness: Regular health camps, distribution of masks, and environmental awareness programs will be conducted for students.
• CSR & Monitoring: Support for school infrastructure and scholarships will be provided under CSR; air and noise monitoring near schools will be included in the EMP.
B. Hospital
Project site: NTPC Stabilization centre, Lara
Study Area:
<table>
<tr><th>PHC/ Sub Health Center (Hospital)</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Deolsura-PHC</td><td>0.5 Km</td><td>W</td></tr>
<tr><td>Nawapara-SHC</td><td>1.35 Km</td><td>N</td></tr>
<tr><td>Kathani-SHC</td><td>1.96 Km</td><td>W</td></tr>
<tr><td>Rengalpali-SHC</td><td>1.40 Km</td><td>E</td></tr>
<tr><td>Netnagar-SHC</td><td>1.7 Km</td><td>NE</td></tr>
<tr><td>Muralipali-SHC</td><td>2.45 Km</td><td>S</td></tr>
<tr><td>Badehaldi-SHC</td><td>3.96 Km</td><td>N</td></tr>
</table>
Protective measures adopted are as follows:
• Dust Suppression: Regular water sprinkling and fogging near access roads and work zones close to health centres.
• Greenbelt Buffer: Plantation of native species between the plant and nearest health centre to reduce air and noise impact.
• Monitoring: Third parity ambient air and noise quality within 0.5 km; data shared with local health authorities.
• Noise & Vibration Control: High-noise and vibration activities to be scheduled outside critical healthcare hours.
• CSR Support: Provision of medical equipment, emergency kits, health camps, and training to nearby health centres.
• Emergency Preparedness: Health centres will be integrated into the project's disaster response and coordination plans.</td><td></td></tr>
<tr><td></td><td>Latitude and Longitude of all corners of the project site</td><td>
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>21°44'54.27"N</td><td>83°27'38.88"E</td></tr>
<tr><td>B</td><td>21°45'49.88"N</td><td>83°27'42.64"E</td></tr>
<tr><td>C</td><td>21°46'19.41"N</td><td>83°27'42.09"E</td></tr>
<tr><td>D</td><td>21°46'13.99"N</td><td>83°27'18.53"E</td></tr>
<tr><td>E</td><td>21°45'43.61"N</td><td>83°27'12.29"E</td></tr>
<tr><td>F</td><td>21°45'48.05"N</td><td>83°26'14.69"E</td></tr>
<tr><td>G</td><td>21°45'1.07"N</td><td>83°26'8.51"E</td></tr>
<tr><td>H</td><td>21°44'56.15"N</td><td>83°26'35.99"E</td></tr>
<tr><td>I</td><td>21°44'57.73"N</td><td>83°27'3.94"E</td></tr>
</table>
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>1</td><td>21°45'48.83"N</td><td>83°26'13.46"E</td></tr>
<tr><td>2</td><td>21°45'52.00"N</td><td>83°25'36.04"E</td></tr>
</table>
</td><td></td></tr>
</table>

<table>
<tr><th>S. No</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>3</td><td>21°45'30.34"N</td><td>83°25'34.04"E</td></tr>
<tr><td>4</td><td>21°45'27.42"N</td><td>83°26'11.50"E</td></tr>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>1</td><td>21°44'18.70"N</td><td>83°28'11.66"E</td></tr>
<tr><td>2</td><td>21°43'49.80"N</td><td>83°28'40.03"E</td></tr>
<tr><td>3</td><td>21°43'44.81"N</td><td>83°28'22.30"E</td></tr>
<tr><td>4</td><td>21°43'21.20"N</td><td>83°28'7.52"E</td></tr>
<tr><td>5</td><td>21°43'8.09" N</td><td>83°27'49.20"E</td></tr>
<tr><td>6</td><td>21°43'18.64"N</td><td>83°27'41.19"E</td></tr>
<tr><td>7</td><td>21°44'0.21"N</td><td>83°27'43.05"E</td></tr>
<tr><td>8</td><td>21°44'6.12"N</td><td>83°27'55.90"E</td></tr>
<tr><td>9</td><td>21°43'58.06"N</td><td>83°28'6.16"E</td></tr>
<tr><td>10</td><td>21°44'2.68"N</td><td>83°28'7.74"E</td></tr>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>21°44'54.73"N</td><td>83°26'55.54"E</td></tr>
<tr><td>B</td><td>21°44'55.69"N</td><td>83°26'57.80"E</td></tr>
<tr><td>C</td><td>21°44'50.75"N</td><td>83°28'07.29"E</td></tr>
<tr><td>D</td><td>21°44'21.48"N</td><td>83°28'04.06"E</td></tr>
<tr><td>E</td><td>21°44'27.51"N</td><td>83°27'08.08"E</td></tr>
</table>
</td><td></td></tr>
<tr><td></td><td>Elevation of the p roject site</td><td>Main Plant: 219 m-235 m,
Township: 221m-234 m,
Existing Ash Dyke: 219 -244 m,
New Ash Dyke: 219 -233 m.</td><td></td></tr>
<tr><td></td><td>Involvement of F orest land if any.</td><td>Total Forest Land Involved: 163.11 ha
• Lara STPP Stage-I: 151.762 ha (Forest Clearances have alread y been accorded by MoEF&CC vide Letter no. F.NO.8-21/ 2012-FC dated 12.05.2014).
• Lara STPP Stage-III: 11.35 Ha of (Chote Jhad ke Jungle) in St age-III (Proposal for Forest Clearance was already submitt ed vide Proposal No FP/CG/IND/542991/2025 date 27.06. 2025 which is under process).</td><td></td></tr>
<tr><td></td><td>Water body (Rive rs, Lakes, Pond, N ala, Natural Drain age, Canal etc.) ex ists within the pro ject site as well as study area</td><td>Project site: No Water Body
Study area:
<table>
<tr><th>Water body</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Nala Near Chhapora Village</td><td>0.05 Km</td><td>N</td></tr>
<tr><td>Kelo River</td><td>0.7 Km</td><td>E</td></tr>
<tr><td>Mahandi River</td><td>2.2 Km</td><td>S</td></tr>
<tr><td>Basanpali Pond</td><td>1.50 Km</td><td>WS</td></tr>
<tr><td>Kevra Pond</td><td>0.77 Km</td><td>W</td></tr>
<tr><td>Chhapora Lake</td><td>0.67 Km</td><td>W</td></tr>
<tr><td>Hirakud reservoir</td><td>12.0 Km</td><td>East</td></tr>
</table>
Plant site (219-235m elevation) is present at higher elevation th an the HFL (196.33 m MSL) of Kelo river.</td><td></td></tr>
<tr><td></td><td>Archaeological sites</td><td>No Archaeological sites monuments</td><td></td></tr>
</table>

S. No	Particulars	Details	Remarks
	monuments/ historical temples etc.		
	Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area.	No National Park / Wild Life Sanctuary / Eco-Sensitive Zone / Biosphere reserve within 10 km radius of the project site boundary. List of Reserved and protected forests: • Gajmar R.F (4.0 km, NNE) • Jharghan R.F (5.5 km, NE) • Holsari Dungri R.F (9.3 km, ESE)	
	Facility envisaged in CRZ area (Only for coastal power plant)	Not Applicable	CRZ map indicating. HTL/LTL demarcated by the authorized agency in 1:4000 scale
	Involvement of Critically Polluted Area/Severely Polluted area as per 2018 CEPI score.	No Involvement of CPA/SPA No Proximity to CPA/SPA	Proposed additional environmental safeguards as per MoEF&CC OM dated 31/10/2019

28.3.5: The unit configuration and capacity of existing and proposed project is given as below:

S. No.	Existing power plant configuration and capacity	Proposed power plant configuration and capacity	Total	Technology
1.	Stage-I: 2x800 MW (1600 MW)	Stage-III: 2x800 MW (1600 MW)	4800 MW	Ultra Super Critical
2.	Stage-II: 2x800 MW (1600 MW)			

28.3.6: The details of the fuel (Coal) requirement for the proposed project/ expansion cum proposed project along with its source and mode of transportation is given as below:

Details	Fuel requirement (MTPA)	Source	Distance from site (Kms)	Mode of Transportation	Coal characteristics (Worst case scenario)	Coal Linkage documents
Existing Lara STPP Stage-I	8.0 MTPA with 90 % PLF	NTPC Talaipali Coal Block Mining Project (TLCMP)	60	MGR	Ash: 32-43(%) Sulphur: 0.5 (%) Moisture:15 (%) GCV:3000-4000 Kcal/Kg	Allocation of Talaipali Coal Block to NTPC for meeting coal requirement of Lara STPP. MOC letter dated 25.01.2006
Existing Lara STPP Stage-II	6.6 MTPA with 85% PLF		60	MGR	Ash: 32-43(%) Sulphur: 0.5 (%) Moisture:15 (%) GCV:3000-4000	

Details	Fuel requirement (MTPA)	Source	Distance from site (Kms)	Mode of Transportation	Coal characteristics (Worst case scenario)	Coal Linkage documents
					Kcal/Kg	
Proposed	6.5 MTPA with 85 % PLF	4.5 MTPA from NTPC Talaipalli Coal Block. Coal linkage for balance requirement (2MTPA) need to be obtained/to be tie up.	60	MGR/Indian Railway	Ash: 32-43(%) Sulphur: 0.5 (%) Moisture:15 (%) GCV:3000-4000 Kcal/Kg	Allocation of Talaipali Coal Block to NTPC for meeting coal requirement of Lara STPP. MOC letter dated 25.01.2006

The details of the fuel LDO requirement for the proposed project/ expansion cum proposed project along with its source and mode of transportation is given as below:

Details	Fuel requirement (in KL PER ANNUM)	Source	Distance from site (Kms)	Mode of Transportation	LDO Characteristics	Linkage document
Existing TPP Stage-I	5956 KL (assuming 85 % PLF with normative oil consumption 0.5 ml/kwh)	BPCL/ HPCL/ IOCL	>600	Rail	Applicable IS 15770: 2008 Calorific Value-9000-10000 K.cal/Kg Sulphur -1.5 (%) Max Flash Point -85(^{0}C)	---
Existing TPP Stage-II	5956 KL (assuming 85 % PLF with normative oil consumption 0.5 ml/kwh)	BPCL/ HPCL/ IOCL	>600	Rail	Applicable IS 15770: 2008 Calorific Value-9000-10000 K.cal/Kg Sulphur -1.5 (%) Max Flash Point -85(^{0}C)	
Proposed TPP Stage-III	5956 KL (assuming 85 % PLF with normative oil consumption 0.5 ml/kwh)	BPCL/ HPCL/ IOCL	>600	Rail	Applicable IS 15770: 2008 Calorific Value-9000-10000 K.cal/Kg Sulphur -1.5 (%) Max Flash Point -85(^{0}C)	---

28.3.7: Water requirement: Existing Water requirement of Stage-I is 4830 m^3/hr (1,15,920 KLD) and Stage-II is 4800 m^3/hr (1,15,200 KLD). The water requirement for the proposed Lara STPP Stage-III is estimated as 1600 m^3/hr (38,400 KLD). Water Resource Department (WRD), Government of Chhattisgarh have accorded permission for water allocation of 45 MCM (5137 m^3/hr) for stage-I (2x800 MW) power project vide letter 8734 dated 02.12.2010 and vide letter 4570 dated 10.06.2013 for 68 MCM (7763 m^3/hr) for Stage-II for Lara STPP from Saradih barrage on river Mahanadi. Water Requirement of Stage-III shall be meet from existing allocation of Water for Stage-I & II. The water will be transported to the plant site through pipeline from 38 km of distance. The specific water consumption for the power plant will be maintained by 3.0 m^3/MWhr.

28.3.8: Power requirement: Existing power requirement of Stage-I & II is 230 MW which are obtained from Lara STPP. The power requirement for the proposed project Stage-III is estimated as 116 MW, which will be obtained from the Lara STPP.

28.3.9: Solid and hazardous waste Management: The details of solid and hazardous waste generation along with its mode of treatment/disposal are furnished as below:

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal	Remarks
	Municipal Solid Waste (Biodegradable)	Residential Colony	135	Composting, & Reuse.	In house composting	
	Municipal Solid Waste (non-biodegradable)		65	Co-processing	Through Co-processor	
	Plastic Packaging waste	Packaging of goods (Plant & offices)	5	Co-processing	Disposal through Co-processor	
3	E-waste	Plant's IT Electrical & Electronic Equipment	05	---	Disposal through authorized recyclers	
4	Used Batteries	Backup power system	02	---	Disposal through authorized recyclers	Provision in contract for buy-back
5	Biomedical Waste	Stabilisation Centre	0.02	---	Disposal in house facility	
6	Hazardous waste					
6.1	Used or spent oil	Operation & Maintenance works	100	--	Disposal through authorized recyclers	
6.2	Spent Ion exchange resin containing toxic metals	Water Treatment work	02	--	Disposal through TSDF	
6.3	Empty barrels/containers/liners contaminated with	Operation & Maintenance works	10000 Nos	--	Sale to authorized recyclers	
6.4	Waste or residue containing oil	Operation & Maintenance works	10	--	Sale to authorized recyclers	
6.5	Mineral Wool	Operation & Maintenance works	30	--	Disposal through TSDF	
6.6	Asbestos	Operation & Maintenance works	0.1	--	Disposal through TSDF	

28.3.10: Cost of project: Existing capital cost of Stage-I project was Rs. 17,869.45 Cr (As per latest approved RCE-III Cost) and Stage-II was Rs. 15,529.99 Cr (As per Investment Approval). The capital cost of the proposed Stage-III project is Rs. 20,500.00 Cr (At Current Cost level including GST.) and the capital cost for environmental protection

measures is proposed as Rs. 3101.40 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 62.03 Crores. The employment generation from the proposed project / expansion is 60 (Permanent) & 4000 (Contractual) during construction and 115 (Permanent) & 1500 (Contractual) during operation.

28.3.11: Green belt development: Green belt area in existing Stage-I & Stage-II is 90.88 ha & 12.71 ha respectively, which is about 27.88 % of 325.91 ha [Main Plant (Stage-I) & Ash Dyke Area (Stage-I)] and 11.80 % of 107.69 ha [Main Plant (Stage-II). Total 3,23,000 No of sapling are already planted. Greenbelt area in proposed Lara STPP Stage-III is 103.44 ha which is about 52.60 % of 196.66 ha [Main Plant (Stage-III) & Ash Dyke Area (Stage-III)]. Thus, total of 207.03 ha area (33.00 % of 630.26 ha [Main Plant (Stage-I, II &II) & Ash Dyke Area (Stage-I&III)] will be developed as greenbelt as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 4,71,475 saplings will be planted and nurtured in 207.03 hectares in 05 years.

28.3.12: Ash management for last three years.

Year	Quantity Generated (LMT)	Quantity utilized (LMT)	% of Utilization	Cumulative Balance Quantity (LMT)	No of storage silos with capacity
2022-23	36.041	13.707	38.03	22.334	3x700=2100 MT
2023-24	31.705	32.835	103.55	21.204	
2024-25	31.254	34.377	110.0	18.081	

A. Fly ash details in last 3 years = 64.73 LMT

S. No.	**Activity (as applicable)**	**Quantity (LMT)**	**Percentage (%)**	**Remarks** (Prior approval of SPCB details to be mentioned)
1.	Fly ash-based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	0.17	0.176	
2.	Construction of roads, road and fly over embankment	56.11	56.67	
3.	Filling up of low-lying area	7.60	7.67	
4.	Filling of mine voids:	0.83	0.84	
5.	Others (please specify) Low lying area/ Abandoned mines/Stone quarry/Road construction	0.04	0.036	Stg2 -low lying ash filling
	Total	**64.73**	**65.38**	

B. Bottom ash details in last 3 years = 16.18 LMT

S. No.	Activity (as applicable)	Quantity (LMT)	Percentage (%)	Remarks (Prior approval of SPCB details to be mentioned)
1.	Fly ash-based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	0.04	0.04	
2.	Construction of roads, road and fly over embankment	14.03	14.17	
3.	Filling up of low-lying area	1.90	1.92	

4.	Filling of mine voids	0.21	0.21	
5.	Others (please specify) Low lying area/ Abandoned mines/Stone quarry/Road construction	0.01	0.01	Stg2 -low lying ash filling
	Total	**16.18**	**16.34**	

C. Legacy ash details - 0 LMT

D. Ash Pond Details:

Existing: One Ash Dyke

S. No.	**Details of Ash Pond**	**Ash Lagoon 1**	**Ash Lagoon-2**	**Ash Lagoon-3**	**Overflow lagoon, Sedimentation basin, Toe drain & Peripheral Darin & Service Road**	**Total**
	Status of ash pond (Active / Exhausted (yet to be reclaimed)/ Reclaimed)	Active (under Ash Utilization)	Active (In Service)	Active (Under 1st Raising Construction)	Operative	Active
	Area (Ha.)	67.78 (starter)	36.62 (starter)	39.66 (starter)	23.96	168.02
	Dyke height (m)	7.5 m (Avg. after 1st Raising)	11.75 m (Avg. after 1st Raising)	7.75 m (Avg. after 1st Raising)	--	
	Volume (m^3)	Starter- 12, 00,000 1st Raising - 12,35,000	Starter-24,00,000 1st Raising- 8,85,000	Starter – 20,00,000 1st Raising - 12,15,000	--	
	Quantity of ash disposed (Metric Tons)				--	41.2 LMT
	Available volume in percentage (per cent) and quantity of ash can be further disposed (Metric Tons)	6.2 LMT	7 LMT	Under 1st Raising Construction	--	13.2 LMT
	Expected life of ash pond (number of years and months)				---	4.5 Months
	Type lining carried in ash pond: HDPE lining of LDPE lining or clay lining or No lining	HCSD Lining	Bentonite Lining	HCSD Lining	---	
	Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HC	HCSD	HCSD & BA Series (LCSD)	Under 1st Raising Construction	---	

S. No.	Details of Ash Pond	Ash Lagoon 1	Ash Lagoon-2	Ash Lagoon-3	Overflow lagoon, Sedimentation basin, Toe drain & Peripheral Darin & Service Road	Total
	SD or MCSD or LCSD)					
	Ratio of ash: water in slurry mix (1:___):	1:6 (Ash slurry)	1:6 (Ash slurry)	1:6 (Ash slurry)	--	
	Ash water recycling system (AWRS) installed and functioning: Yes or No	No	YES	Yes	--	
	Quantity of wastewater from ash pond discharged into land or water body (m^3)	Nil	Nil	Nil	--	
	Last date when the dyke stability study was conducted and name of the organization who conducted the study:	14.12.2021	14.12.2021	14.12.2021	--	14.12.2021 (by IIT Hyderabad)
	Last date when the audit was conducted and name of the organization who conducted the audit:	18.03.2025	18.03.2025	18.03.2025	--	18.03.2025 (Certification Audit by NIT Warangal)

E. Proposed ash utilization plan for expansion project:

Details	Existing generation Stage-I (MTPA)	Proposed generation Stage-II (MTPA)	Proposed generation Stage-III (MTPA)	Total (MTPA)	Utilization (MTPA)	% of utilization	Balance quantity (MTPA)	No. of storage silos with capacity
Ash (Fly & Bottom)	3200000	3200000	3200000	9600000	9600000	100%	Nil	For Stage I: 3x500 MT (HCSD Silos) and 4x1500 MT (Main Silos) =7500 MT Envisaged. For Stage II 4x2000 MT and Stage III: 4x1500 MT

New Ash Pond Details: One New Ash Pond is proposed for Lara Stage-III and the details of new ash pond is provided as below:

S. N.	Details of Ash Pond	Fly Ash Lagoon- 1	Bottom Ash Lagoon-2	Bottom Ash Lagoon-3	Over-flow lagoon	Total
1.	Area (Ha)	39	40	40	6	125
2.	Dyke height (m)	10 m +3m (Starter dyke+1 raising)	10 m+3m+3m (Starter dyke+2 raising)	10 m+3m+3m (Starter dyke+2 raising)	7 m (Starter dyke)	
3.	Volume (m^3)	3.40 Million m3	4.10 Million m3	4.10 Million m3	0.25 Million m3	
4.	Quantity of ash to be disposed (Metric Tons)	3.40 Million Metric Tons (considering density as 1T/Cum)	4.10 Million Metric Tons (considering density as 1T/Cum)	4.10 Million Metric Tons (considering density as 1T/Cum)	For collection and re-circulation of decanted water	
5.	Expected life of ash pond (number of years and months)	1 Years 1 Months (w.r.t. total ash generation of Stage-II)	1 Years 4 Months (w.r.t. total ash generation of Stage-II)	1 Years 4 Months (w.r.t. total ash generation of Stage-II)		
6.	Type lining carried in ash pond: HDPE lining of LDPE lining or clay lining or No lining	Suitable impervious lining as per actual site conditions meeting the imperviousness requirements as per standard “Guidelines for Design, Construction, O&M and Annual certification of Coal Ash Ponds-June 2023”. HDPE lining system is envisaged in OFL and Bentonite blended lining in all ash storage lagoons.				
7.	Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD)	Fly Ash-HCSD Bottom Ash-LCSD			Not Applicable	
8.	Ratio of ash: water in slurry mix (1: ___):	Fly Ash-HCSD-1:1(50% on Dry Ash basis) Bottom Ash-LCSD-1:4(25% on Dry Ash basis)			Not Applicable	
9.	Ash water recycling system (AWRS): Yes or No	Yes			Not Applicable	
10.	Quantity of wastewater from ash pond to be discharged into land or water body (m^3)	Nil			Not Applicable	
11	Details regarding dyke stability study and name of the organization who conducte	As already done in all past ash dyke stability design, this will also be done by NTPC, (in-house design) in line with standard “Guidelines for Design, Construction, O&M and Annual certification of Coal Ash Ponds-June 2023”. Adequate measures for safety and stability of the Ash dyke i				

S. N.	Details of Ash Pond	Fly Ash Lagoon- 1	Bottom Ash Lagoon-2	Bottom Ash Lagoon-3	Over-flow lagoon	Total
	d the study	s considered from design stage. Not Applicable				

28.3.13: Baseline data collection: Baseline data collection period: 05.03.2025 to 31.05.2025

Attributes	Parameters	Sampling No. of stations	Frequency	Remarks
A. Air				
	Wind speed & direction Max. & Minimum Temp. (Wet & Dry bulb Temp.) Humidity Atmospheric pressure Rainfall Storm Temperature	1	Continuous	A Continuous Automatic Monitoring Meteorological station is established at near to site
b. AAQ parameters	SO2 NOX (NO2) PM10 PM2.5	10	Twice a week	24-hour sampling at each location using appropriate ambient air quality instruments.
B. Noise	Leq.	10	Once in Season	24 hourly sampling at each location using an integrating sound level meter
C. Water				
Surface water/Ground water quality parameters	Physical parameters: Temperature, Turbidity, Colour, Electrical Conductivity, TSS, TDS Chemical Parameters: pH, DO, Alkalinity, Hardness, BOD, COD, NO3, PO4, Cl, F, SO4, Na, K, Ca, Mg, Silica, Oil & Grease. Bacteriological: MPN and Total coliform Heavy Metals (As, Hg, Pb, Cd, Cr6, Total Cr, Cu, Zn, Se, Fe).	13	Monthly	-
D. Land				
a. Soil quality	Classification, Texture, pH, Conductivity, Cation Exchange Capacity (CEC), N, P, K, Heavy Metals	10	One time	-
b. Land use	Land use classification	10 km-Study Area	One time	-

Attributes	Parameters	Sampling No. of stations	Frequency	Remarks
E. Flora & Fauna: Ecology & Biodiversity Study				
Terrestrial/Aquatic	Tree Quadrat Point count Plankton Study Line Transect	15 08 04 05	One time	-
F. Socio-economic parameters	Socio-economic study of the study area	10 km from the plant site	One time	Primary survey affected families
G. Traffic study	Traffic Assessment	03	One time	-

28.3.14: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration shall be furnished.

A. Summary of court cases

There are total 83 case related with Lara STPP, out of these 02 cases are related with Arbitration, 03 cases related to Civil Application, 07 cases related to Contract Matter, 02 cases related to Labour, 01 cases related to The Insolvency and Bankruptcy Code (IBC), 64 cases related to Land Acquisition, 02 Cases related to Land Acquisition/ROU, 01 cases related to Misc., & 01 case related with Service. There is no court case related with Environment etc.

B. Summary of Show Cause Notices: There are no Show Cause Notices pertaining to Environment & Forest.

C. Summary of violation: There is no violation case pertaining to the project under the Environment Protection Act, 1986; Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980; the Wildlife (Protection) Act, 1972.

28.3.15: Written submission: Project proponent submitted the following written submissions during the meeting:

S. No.	
1.	*PP needs to submit Solar Capacity Action Plan for Lara STPP*

S No	Location	Capacity	Status
01	Lara Stage- I	1164 Kw	Implemented
02	Lara Township	440 KW	Implemented
		340 KW	Under Erection
		1105 KW	Under Award
03	Lara Stage-II	1000 KW	Part of EPC Package

2.	*PP shall submit details of Chimney height*
	The Chimney height for Stage-II of Lara STPP will be 275 m without FGD in place of Chimney of 150/220m vide EC letter no for Lara STPP Stage-II :J-13012/11/2018-IA-I(T) dated 17.07.2023.
3.	*PP shall submit the revised land use break up for Ash Pond area*

S.N.	Description	Stage-I (Ha)	Stage-II (Ha)	Stage-III (Ha)	Total (Ha)
1	Main Plant	157.89	107.69	71.66	337.24
2	Ash Dyke	168.02	0.00	125.00	293.02
	Sub Total (Plant & Ash Dyke)	325.91	107.69	196.66	630.26
3	Green Belt	90.88	12.71	103.44	207.03
	Green Belt (%) of Main	27.88	11.80	52.60	33.00

	Plant & Ash Dyke Area				
4	Reservoir	54.66	23.89	0.00	78.55
5	Township	61.13	0.00	0.00	61.13
6	Peripheral Road (Public)	49.8	16.32	4.34	70.46
7	Ash Corridors	21.39	0.00	0.00	21.39
8	Rly Siding	31.17	6.62	2.23	40.02
9	Make-up water PH Area	2.85	0.00	0.00	2.85
10	Ash Brick Plant	0.00	0.00	2.83	2.83
	Total Project land (except green belt in Ha)	546.91	154.52	206.06	907.49
11	Green belt outside plant(NTPC acquired land)	0.00	87.04	26.32	113.36
	Total (Ha)	**637.79**	**254.27**	**335.82**	**1227.88**

Note:
1. Common Property Resource Land (40.89 Ha) handed over to respective village.
2. The green belt on 202.03 Ha will be developed inside the plant boundary i.e: 33 % of the Main Plant and Ash Dyke area. Green belt of 320.39 Ha inside and outside of plant on NTPC acquired land accounting to 35.3 % of the total project land .

4. *PP shall disclose the Distance of NTPC Lara from Non-attainment cities in state of Chattisgarh and Odisha as per CPCB list*

Nearest non-attainment city is Korba which is at 99 Km from NTPC Lara.

City	Aerial distance from NTPC Lara	City	Aerial distance from NTPC Lara	City	Aerial distance from NTPC Lara
Korba	98.9 Km	Talcher	203.15 Km	Cuttack	290 Km
Bhilai	227.07 Km	Angul	198 Km	Rourkela	154 Km
Raipur	197.44	Bhubneshwar	294.4 Km		

3.3.3. Deliberations by the committee in previous meetings

N/A

3.3.4. Deliberations by the EAC in current meetings

Observations and deliberation of the EAC

28.3.16: The Committee observed and noted the following:

i. Instant proposal is seeking for Expansion of Lara Super Thermal Power Project from 3200 MW [Stage-I (2x800 MW) & Stage-II (2x800 MW)] to 4800 MW by adding two units of 800 MW (2x800 MW) under Lara Super Thermal Power Project, Stage-III (2x800 MW) by M/s NTPC Limited located at Villages Armuda, Chhapora, Bodajhariya, Mahloi, Riyapalli, Kandagarh. Devalpura, Ghutkupali, Thengapali, Lara in Tehsil Pussore, District Raigarh and Village Saradih in Tehsil Dabhara, District Sakti, Chhattisgarh.

ii. The existing "2x800 MW Coal Based Lara Super Thermal Power Project" was accorded environmental clearance vide file.no J 13012/79/2007-IA. II(T) dated 13.12.2012 from MOEF&CC. Consent to Operate for the existing unit was accorded by Chhattisgarh Environment Conservation Board, Raipur, (C.G.) vide No 1109/TS/CECB/2025 dated 29.04.2025. The validity of CTO is up to 30.04.2026. "2x800 MW (Expansion, Stage-II) Coal Based Lara Super Thermal Power Project" was accorded environmental clearance vide EC ID No EC23A0601CG5636268E dated 17.07.2023 from MOEF&CC is under construction. Consent to Establish for the existing units of Stage-II was accorded by Chhattisgarh Environment Conservation Board, Raipur, (C.G.) vide No. 3168/TS/CECB/2024 dated 12.07.2024. The validity of CTE is up to 11.07.2029.

iii. Total Forest Land Involved is 163.11 ha. Lara STPP Stage-I: 151.762 ha (Forest Clearances have already been

accorded by MoEF&CC vide Letter no. F.NO.8-21/2012-FC dated 12.05.2014). Lara STPP Stage-III: 11.35 Ha of (Chote Jhad ke Jungle) in Stage-III (Proposal for Forest Clearance was already submitted vide Proposal No FP/CG/IND/542991/2025 date 27.06.2025 which is under process).

iv. The EAC also took into consideration the drone survey of the project site and KML file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH.

v. There is no ESZ, National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site as ascertained from DSS.

vi. Existing Water requirement of Stage-I is 4830 m3/hr (1,15,920 KLD) and Stage-II is 4800 m3/hr (1,15,200 KLD). The water requirement for the proposed Lara STPP Stage-III is estimated as 1600 m3/hr (38,400 KLD). Water Resource Department (WRD), Government of Chhattisgarh have accorded permission for water allocation of 45 MCM (5137 m3/hr) for stage-I (2x800 MW) power project vide letter 8734 dated 02.12.2010 and vide letter 4570 dated 10.06.2013 for 68 MCM (7763 m3/hr) for Stage-II for Lara STPP from Saradih barrage on river Mahanadi. Water Requirement of Stage-III shall be meet from existing allocation of Water for Stage-I & II. The water will be transported to the plant site through pipeline from 38 km of distance. The specific water consumption for the power plant will be maintained by 3.0 m3/MWhr.

vii. Existing power requirement of Stage-I & II is 230 MW which are obtained from Lara STPP. The power requirement for the proposed project Stage-III is estimated as 116 MW, which will be obtained from the Lara STPP.

viii. The capital cost of the proposed Stage-III project is Rs. 20,500.00 Cr (At Current Cost level including GST.) and the capital cost for environmental protection measures is proposed as Rs. 3101.40 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 62.03 Crores.

ix. Coal requirement for the Stage-III of the project is estimated at about 6.5 MTPA corresponding to 85% PLF considering GCV of 3000-4000 Kcal/Kg. After meeting the coal requirement of Stage-I and Stage-II, 4.5 MTPA Coal shall be available for Stage-III from Talaipalli Coal Block. Coal linkage for balance requirement (2 MTPA) need to be obtained/to be tie up.

x. Greenbelt area in proposed Lara STPP Stage-III is 103.44 ha which is about 52.60 % of 196.66 ha [Main Plant (Stage-III) & Ash Dyke Area (Stage-III)]. Thus, total of 207.03 ha area (33.00 % of 630.26 ha [Main Plant (Stage-I, II &II) & Ash Dyke Area (Stage-I&III)] will be developed as greenbelt as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 4,71,475 saplings will be planted and nurtured in 207.03 hectares in 05 years.

xi. Schools are located in range of 0.38 Km to 2.1 Km from the plant boundary. Health centres are located at a distance of 0.5 km to 3.96 km from the plant boundary. A dense greenbelt, comprising native and pollution tolerant species, shall be developed around the plant boundary. Vegetative buffers act as natural air filters and noise retarders. In addition, windshield curtains and dust containment structures shall be installed at coal and ash handling areas to minimize particulate escape toward habitations.

xii. The project site is not located within the Critically Polluted Area (CPA) / Severally Polluted Area (SPA) as per CEPI assessment 2018 of CPCB.

xiii. Committee deliberated on the existing ash management and observed that the percentage of ash utilization for the FY 2024-25 was 110%. For proposed unit, the estimated ash generation would be 3200000 MTPA and would be utilized by 100%. A new ash pond of 125 ha is envisaged for the proposed Lara Stage-III project.

xiv. Zero liquid discharge (ZLD) will be adopted for the proposed plant using suitable effluent treatment plant, sludge thickener and RO systems.

xv. EAC deliberated on construction of stack height and observed that stack height of stage II and stage III chimney would be 275 m without FGD as per the provisions contained under Notification no GSR 465 (E) dated 11/07/2025.

xvi. EAC suggested to revisit and reduce the area of proposed ash dyke from 160 ha to 125 Ha for proposed Lara Stage-III expansion project and to submit the revised land use breakup details for the same.

xvii. EAC suggested to revisit the land utilization for Green belt development and advised for plantation within the project site but not 5km away from the project boundary.

xviii. EAC suggested to develop the Ash dyke /pond away from the Water bodies/nala.

xix. Kelo River is located at 0.7 Km of the project boundary. Authenticated HFL data of the water body as per MoEF&CC O.M. dated 14/02/2022 shall be furnished.

xx. EAC deliberated on Solar installation status by the PP and noted that 1164 KW solar installation is implemented in Stage I, in Lara Township 440 KW is implemented and 340 KW is under erection and 1105 KW is under awarding process. In Stage-II, 1000 KW solar installation is kept as a part of EPC Package.

xxi. PP shall calculate total carbon emission and sequestration in the proposed plant and the same shall be mentioned during the EC application.

xxii. The committee noted that there are 83 court case related with Lara STPP, however, no court case is related with Environment.

xxiii. The baseline data were collected from March to May 2025.

xxiv. The EAC also deliberated on the written submission of the project proponent, and found it satisfactory.

xxv. EAC opined that there should be a site visit by the Sub-committee of EAC to see the various environmental issues pertaining to the instant project before consideration of EC proposal.

xxvi. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the

application and enclosures are true to the best of his knowledge and If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

Recommendations of the Committee:

28.3.17: The EAC after detailed deliberations on the information submitted and as presented during the meeting **recommended** the proposal for grant of ToR for conducting an EIA study for the above project **subject to uploading of written submission on PARIVESH Portal** under the provisions of the EIA Notification, 2006, as amended along with the following specific ToR in addition to the generic ToRs.

3.3.5. Recommendation of EAC

Recommended (Subject to submission of requisite information/ documents)

3.3.6. Details of Terms of Reference

3.3.6.1. Specific

[A] Environmental Management and Biodiversity Conservation	
1.	Project proponent shall submit stage I FC (or) status of stage I FC for 11.35 Ha of forest land as per the provision contained under MoEF&CC O.M. dated 09/09/2011 and its amendments.
2.	A Cumulative Environmental Impact Assessment study of all the existing and proposed projects in the 10-km radius of the proposed project shall be conducted and the same shall be included the in EIA/EMP report. Details of industrial units present in 10 Km radius of the power plant shall be earmarked in map and submitted.
3.	Certified compliance report containing compliance to the prescribed EC conditions for the 2x800 MW (Stage I) and 2x800MW (Stage II) as per the MoEF&CC O.M. dated 08/06/2022 shall be submitted.
4.	Project Proponent shall explore the feasibility of using treated sewage from Sewage Treatment Plants located within 50 km radius of the proposed project as an alternative to the fresh water source to minimize the freshwater drawl from surface water bodies. Action plan in this regard shall be submitted.
5.	Project proponent shall explore the feasibility of using air cooled condenser in place of water-cooled condenser and details shall be incorporated in the final EIA/EMP report.
6.	Project proponent shall optimize the land requirement for the proposed ash pond and design details of the same shall submitted in the EIA/EMP report.
7.	Certificate from concerned District Magistrate/Executive Engineer from the State Water Resources department (or) any officer authorized by the State Government in this regard shall be submitted stating that project site is not located within flood plain corresponding to one in 25 years of flood as per Ministry's O.M. dated 14/02/2022.
8.	All the parameters as mentioned in the National Ambient Air Quality Standards (NAAQS) shall be monitored by the project proponent.
9.	Project proponent shall also obtain recommendations from the State Forest department regarding the impact of project on the nearby Reserved Forests, if any, along with the mitigation measures to be followed.
10.	EIA/EMP study shall take into consideration the different scenarios arising due to change of coal source, impact on environmental attributes due to change of coal source along with corresponding mitigation measures with EMP budget shall be submitted.
11.	Biodiversity analysis of the project site and study area shall be done through any NABET accredited consultant. The study report shall inter-alia include impact of release of cooling tower water on aquatic life and action plan for

	complying with the mitigation measures shall be submitted.
12.	Project proponent shall commission a study on Hydrology and Hydrogeology of the project site as well as the study area of the project site through a NABET accredited consultant. The study report along with the action plan for implementing the recommendations of the report shall be submitted along with the EIA/EMP report.
13.	Radioactivity studies along with coal analysis to be provided (sulphur, ash percentage and heavy metals including Pb, Cr, As and Hg). Details of auxiliary fuel, if any including its quantity, quality, storage, etc should also be given.
14.	PP should submit the detailed plan in tabular format (year-wise) for concurrent afforestation and green belt development in and around the project site covering 33 % of the project area. The PP should submit the number of saplings to be planted, names of native species, area to be covered under afforestation & green belt, location of plantation, target for survival rate and budget earmarked for the afforestation & green belt development. The capital and recurring expenditure to be incurred needs to be submitted. Plantation plan should be prepared in such a way that 80% of the plantation to be carried out in first 5 years and for the remaining years the proposal for gap filling. The seedling should be of native and few fruit bearing species mainly, of height not less than 2 meters to be selected and accordingly cost of plantation needs to be decided.
15.	Action plan for development of three-tier plantation programme (33.0% of total project cover area) along the periphery of the project boundary and the coal transportation route shall be provided. PP shall submit concurrent plantation plan.
16.	Detailed action plan shall be prepared for maintenance of air pollution control equipment for proposed units and shall be incorporated in the EIA/EMP report.
17.	Details of Ash management plan as per MoEF&CC notification dated 31/12/2021 & its subsequent amendment for the proposed project shall be submitted. MoU signed for ash utilization with companies shall be submitted.
18.	Action plan for dry ash collection system (Bottom ash and Fly ash) shall be submitted.
19.	Action plan for disposal of ash through High Concentration Slurry Disposal (only in emergency conditions) shall be submitted.
20.	Proper protection measures like high-density polyethylene (HDPE) lining, appropriate height of bund and adequate distance between the proposed Ash pond and water body (minimum 60 meters) etc. shall be planned to reduce the possibility of mixing leachate with any freshwater body for ash pond. A high-density Slurry disposal plan shall be prepared.
21.	Pond and ground water quality (10 locations within 2 km radius of the plant boundary) shall be studied, and report be submitted along with EIA/EMP. Action plan for Ground water monitoring stations on all hotspots like schools/hospitals within 2 km radius of the plant boundary be submitted. Baseline Study for Heavy metals in Groundwater, Surface water and soil to be carried out and incorporated in EIA/EMP report.
22.	Details pertaining to water source, treatment and discharge should be provided.
23.	PP shall provide the details of wastewater treatment facilities to be installed within its capacity, timeline and budget.
24.	Project Proponent to conduct Environmental Cost Benefit Analysis for the project in EIA/EMP Report.
25.	An action plan shall be prepared for Water shed development within 10 km radius of the plant boundary in consultation with reputed government institution and incorporated in EIA/EMP report.

26.	PP should clearly bring out that what is the specific diesel consumption ~ (Liters/Tonne of total material handled) and steps to be taken for reduction of the same. The year-wise target for reduction in the specific diesel consumption needs to be submitted. PP shall also explore the possibility of using e-vehicles/LNG/CNG-based machinery and trucks for the operation and transportation of Coal and ash and submit an implementation strategy.
27.	PP shall provide the details of transportation of fly ash from the plant, transportation route etc. Further, carry out a traffic study for at least one month and provide the impact of transportation along with the mitigation measures.
28.	PP shall submit the action plan to adhere to the Plastic Waste Management Rules 2016 and to adhere Ministry's OM dated 18/07/2022.
29.	Details on renewable energy (solar plant) proposed to be installed as energy conservation measures and action plan for the same shall be submitted.
30.	The input parameters for the AAQ modelling and the influence of various combinations of these on the AAQ must be reported in the EIA/EMP Report. In addition to the Wind Rose diagram collected for one season during the preparation of the E.I.A., wind rose diagram for all seasons must be provided using secondary data from sources such as IMD/CPCB etc.
31.	Project proponent shall take all necessary steps to control the Air Quality and take additional mitigation measures for proposed TPP to maintain the Ambient Air Quality values within the limits. The action plan regarding maintaining ambient quality standards (Time weighted average for 24 hours and Annual both) be submitted. Further, project proponent shall submit an undertaking to abide by the provisions of the notification number G.S.R 465 (E) dated 11/07/2025 related to FGD, as amended, and any subsequent amendment there of pursuant to the outcome of study carried out by CPCB in this regard.
32.	Details of air pollution control devices to be installed in the proposed 2x800 MW TPP along with its maintenance schedule shall be incorporated in EIA/EMP report.
33.	Carbon emission due to TPP and allied carbon sequestration/ carbon offsetting plan be submitted.
34.	PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign, which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than green belt development. An action plan in this regard shall be submitted.
[B] Disaster Management	
1.	A Disaster Management Plan shall be prepared and incorporated in the EIA/EMP report.
[C] Socio-economic study	
1.	Public Health Action Plan including the provisions for drinking water supply for the local population shall be in the EIA/EMP Report. The status of the existing medical facilities in the project area shall be discussed. Possibilities of strengthening of existing medical facilities, construction of new medical infrastructure etc. will be explored after assessing the needs of the labour force and local populace.
2.	Public consultation (Public Hearing and Written submission) shall be conducted as per the provisions of EIA Notification, 2006 and as amended. As per the Ministry's OM dated 30.09.2020, to address the concern raised during the Public Hearing, the Project Proponent is required to submit the detailed activities proposed with year wise budgetary provision (Capital and recurring) for 5 years. Activities proposed shall be part of EMP. Tentative no. of project affected families (if any) shall be identified and accordingly appropriate Rehabilitation &Resettlement plan shall be prepared. The recommendation Socio-economic study may also be considered while planning the activities & budget.
3.	A need based Social Impact Assessment Study shall also be carried out and an action plan on its recommendations may also be submitted with budgetary provisions.

4.	Demographic details and land use change details in 10 km area shall be submitted.
[D] Miscellaneous	
1.	Plot the wind rose diagram using the Typical Meteorological Year (TMY) data for the period considered for the study. The monitoring units shall be deployed in the field based on the coverage area ratio and direction of the wind. A mathematical model shall be developed for the local site rather than using the standard model available in software for both air & water quality modelling.
2.	PP shall align its activities to one/few of the Sustainable Development Goals (SDG) and start working on the mission of net zero by 2050. PPs shall update the same to the EAC.
3.	PP shall submit the EIA/EMP report after the plagiarism check using authenticated plagiarism software.
4.	Detailed description of all the court cases along with its current status shall be submitted.
5.	PP should provide in the EIA Report details of all the statutory clearances, permissions, no objection certificates, consents etc. obtained for this project under various Acts, Rules and regulations shall be submitted. Further, all the permissions/MoUs obtained for this project shall be revalidated and submitted along with the EIA/EMP report.
6.	The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs, which will analyse the samples.
7.	PP should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations. In addition to this PP should mention the number and designation of persons to be engaged for the implementation of environmental management plan (EMP). The capital and recurring expenditure to be incurred needs to be submitted.
8.	PP should submit the year-wise, activity wise and time-bound budget earmarked for EMP, occupational health surveillance, and activities proposed to address the issues raised during Public Hearing. The capital and recurring expenditure to be incurred needs to be submitted.
9.	Activities shall be prepared based on the issues arise during public hearing conducted and fresh written submission with defined timeline and budgetary provisions.
10.	Aerial view video of project site and coal transportation route proposed for this project shall be recorded through drone and be submitted.
11.	The PP should ensure that only NABET-accredited consultants shall be engaged for the preparation of EIA/EMP Reports. PP shall ensure that the accreditation of the consultant is valid during the collection of baseline data, preparation of EIA/EMP report and the appraisal process. The PP and consultant should submit an undertaking the information and data provided in the EIA Report and submitted to the Ministry are factually correct and the PP and consultant are fully accountable for the same.
12.	PP should provide in the EIA Report details of the statutory clearances, permissions, no objection certificates, consents etc. required for this project under various Acts, Rules and regulations and their status or estimated timeline after the grant of EC.
13.	All the certificates viz. involvement of Forestland, distance from the protected area, and list of flora & fauna should be duly authenticated by the Forest Department. The Certificate should bear the name, designation, official seal of the person signing the certificate and dispatch number.
14.	The findings of the subcommittee report shall be incorporated in the final EIA/EMP report.

3.3.6.2. Standard

1(d)	**Thermal Power Plants**
Statutory compliance	
1.	The proposed project shall be given a unique name in consonance with the name submitted to other Government Departments etc. for its better identification and reference.
2.	Vision document specifying prospective long term plan of the project shall be formulated and submitted.
3.	Latest compliance report duly certified by the Regional Office of MoEF&CC for the conditions stipulated in the environmental and CRZ clearances of the previous phase(s) for the expansion projects shall be submitted.
Details of the Project and Site	
1.	The project proponent needs to identify minimum three potential sites based on environmental, ecological and economic considerations, and choose one appropriate site having minimum impacts on ecology and environment. A detailed comparison of the sites in this regard shall be submitted.
2.	Executive summary of the project indicating relevant details along with recent photographs of the proposed site (s) shall be provided. Response to the issues raised during Public Hearing and the written representations (if any), along with a time bound Action Plan and budgetary allocations to address the same, shall be provided in a tabular form, against each action proposed.
3.	Harnessing solar power within the premises of the plant particularly at available roof tops and other available areas shall be formulated and for expansion projects, status of implementation shall also be submitted.
4.	The geographical coordinates (WGS 84) of the proposed site (plant boundary), including location of ash pond along with topo sheet (1:50,000 scale) and IRS satellite map of the area, shall be submitted. Elevation of plant site and ash pond with respect to HFL of water body/nallah/River and high tide level from the sea shall be specified, if the site is located in proximity to them.
5.	Layout plan indicating break-up of plant area, ash pond, green belt, infrastructure, roads etc. shall be provided.
6.	Land requirement for the project shall be optimized and in any case not more than what has been specified by CEA from time to time. Item wise break up of land requirement shall be provided.
7.	Present land use (including land class/kism) as per the revenue records and State Govt. records of the proposed site shall be furnished. Information on land to be acquired including coal transportation system, laying of pipeline, ROW, transmission lines etc. shall be specifically submitted. Status of land acquisition and litigation, if any, should be provided.
8.	If the project involves forest land, details of application, including date of application, area applied for, and application registration number, for diversion under FCA and its status should be provided along with copies of relevant documents.
9.	The land acquisition and R&R scheme with a time bound Action Plan should be formulated and addressed in the EIA report.
10.	Satellite imagery and authenticated topo sheet indicating drainage, cropping pattern, water bodies (wetland, river system, stream, nallahs, ponds etc.), location of nearest habitations (villages), creeks, mangroves, rivers, reservoirs etc. in the study area shall be provided.
11.	Topography of the study area supported by toposheet on 1:50,000 scale of Survey of India, along with a large scale map preferably of 1:25,000 scale and the specific information whether the site requires any filling shall be provided. In that case, details of filling, quantity of required fill material; its source, transportation etc. shall be submitted.

Ecology biodiversity and Environment	
1.	A detailed study on land use pattern in the study area shall be carried out including identification of common property resources (such as grazing and community land, water resources etc.) available and Action Plan for its protection and management shall be formulated. If acquisition of grazing land is involved, it shall be ensured that an equal area of grazing land be acquired and developed and detailed plan submitted.
2.	Location of any National Park, Sanctuary, Elephant/Tiger Reserve (existing as well as proposed), migratory routes / wildlife corridor, if any, within 10 km of the project site shall be specified and marked on the map duly authenticated by the Chief Wildlife Warden of the State or an officer authorized by him.
3.	A mineralogical map of the proposed site (including soil type) and information (if available) that the site is not located on potentially mineable mineral deposit shall be submitted.
4.	The water requirement shall be optimized (by adopting measures such as dry fly ash and dry bottom ash disposal system, air cooled condenser, concept of zero discharge) and in any case not more than that stipulated by CEA from time to time, to be submitted along with details of source of water and water balance diagram. Details of water balance calculated shall take into account reuse and re- circulation of effluents.
5.	Water body/Nallah (if any) passing across the site should not be disturbed as far as possible. In case any Nallah / drain is proposed to be diverted, it shall be ensured that the diversion does not disturb the natural drainage pattern of the area. Details of proposed diversion shall be furnished duly approved by the concerned Department of the State.
6.	It shall also be ensured that a minimum of 500 m distance of plant boundary is kept from the HFL of river system / streams etc. and the boundary of site should also be located 500 m away from railway track and National Highways.
7.	Hydro-geological study of the area shall be carried out through an institute/ organization of repute to assess the impact on ground and surface water regimes. Specific mitigation measures shall be spelt out and time bound Action Plan for its implementation shall be submitted
8.	Detailed Studies on the impacts of the ecology including fisheries of the River/Estuary/Sea due to the proposed withdrawal of water / discharge of treated wastewater into the River/Sea etc shall be carried out and submitted along with the EIA Report. In case of requirement of marine impact assessment study, the location of intake and outfall shall be clearly specified along with depth of water drawl and discharge into open sea.
9.	Source of water and its sustainability even in lean season shall be provided along with details of ecological impacts arising out of withdrawal of water and taking into account inter-state shares (if any). Information on other competing sources downstream of the proposed project and commitment regarding availability of requisite quantity of water from the Competent Authority shall be provided along with letter / document stating firm allocation of water.
10.	Detailed plan for rainwater harvesting and its proposed utilization in the plant shall be furnished.In addition, wherever ground water is drawn, PP shall submit detailed plan of Water charging activity to be undertaken.
11.	Feasibility of near zero discharge concept shall be critically examined and its details submitted.
12.	Optimization of Cycles of Concentration (COC) along with other water conservation measures in the project shall be specified.
13.	Plan for recirculation of ash pond water and its implementation shall be submitted.
14.	Detailed plan for conducting monitoring of water quality regularly with proper maintenance of records shall be formulated. Detail of methodology and identification of monitoring points (between the plant and drainage in the direction of flow of surface / ground water) shall be submitted. It shall be ensured that parameter to be monitored

	also include heavy metals. A provision for long-term monitoring of ground water table using Piezometer shall be incorporated in EIA, particularly from the study area.
15.	Hazards Characterization: Past incidents of hazard events within 10km radius of project area with detailed analysis of causes and probability of reoccurrence
Environmental Baseline study and mitigation measures	
1.	One complete season (critical season) site specific meteorological and AAQ data (except monsoon season) as per latest MoEF&CC Notification shall be collected along with past three year's meteorological data for that particular season for wins speed analysisand the dates of monitoring shall be recorded. The parameters to be covered for AAQ shall include PM10, PM2.5, SO2, NOx, CO and Hg. The location of the monitoring stations should be so decided so as to take into consideration the upwind direction, pre-dominant downwind direction, other dominant directions, habitation and sensitive receptors. There should be at least one monitoring station each in the upwind and in the pre - dominant downwind direction at a location where maximum ground level concentration is likely to occur.
2.	In case of expansion project, air quality monitoring data of 104 observations a year for relevant parameters at air quality monitoring stations as identified/stipulated shall be submitted to assess for compliance of AAQ Standards (annual average as well as 24 hrs).
3.	A list of industries existing and proposed in the study area shall be furnished.
4.	Cumulative impacts of all sources of emissions including handling and transportation of existing and proposed projects on the environment of the area shall be assessed in detail. Details of the Model used and the input data used for modelling shall also be provided. The air quality contours should be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any. The windrose and isopleths should also be shown on the location map. The cumulative study should also include impacts on water, soil and socio-economics.
5.	Radio activity and heavy metal contents of coal to be sourced shall be examined and submitted along with laboratory reports.
6.	Fuel analysis shall be provided. Details of auxiliary fuel, if any, including its quantity, quality, storage etc should also be furnished.
7.	Quantity of fuel required, its source and characteristics and documentary evidence to substantiate confirmed fuel linkage shall be furnished. The Ministry's Notification dated 02.01.2014 regarding ash content in coal shall be complied. For the expansion projects, the compliance of the existing units to the said Notification shall also be submitted
8.	Details of transportation of fuel from the source (including port handling) to the proposed plant and its impact on ambient AAQ shall be suitably assessed and submitted. If transportation entails a long distance it shall be ensured that rail transportation to the site shall be first assessed. Wagon loading at source shall preferably be through silo/conveyor belt.
9.	For proposals based on imported coal, inland transportation and port handling and rail movement shall be examined and details furnished. The approval of the Port and Rail Authorities shall be submitted.
10.	Details regarding infrastructure facilities such as sanitation, fuel, restrooms, medical facilities, safety during construction phase etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase should be adequately catered for and details furnished.
Environmental Management Plan	
1.	EMP to mitigate the adverse impacts due to the project along with item - wise cost of its implementation in a time bound manner shall be specified.

2.	A Disaster Management Plan (DMP) along with risk assessment study including fire and explosion issues due to storage and use of fuel should be prepared. It should take into account the maximum inventory of storage at site at any point of time. The risk contours should be plotted on the plant layout map clearly showing which of the proposed activities would be affected in case of an accident taking place. Based on the same, proposed safeguard measures should be provided. Measures to guard against fire hazards should also be invariably provided. Provision for mock drills shall be suitably incorporated to check the efficiency of the plans drawn.
3.	The DMP so formulated shall include measures against likely Fires/Tsunami/Cyclones/Storm Surges/ Earthquakes etc, as applicable. It shall be ensured that DMP consists of both On-site and Off-site plans, complete with details of containing likely disaster and shall specifically mention personnel identified for the task. Smaller version of the plan for different possible disasters shall be prepared both in English and local languages and circulated widely.
4.	Details of fly ash utilization plan as per the latest fly ash Utilization Notification of GOI along with firm agreements / MoU with contracting parties including other usages etc. shall be submitted. The plan shall also include disposal method / mechanism of bottom ash along with monitoring mechanism.
Green belt development	
1.	Detailed scheme for raising green belt of native species of appropriate width (50 to 100 m) and consisting of at least 3 tiers around plant boundary not less than 2000 tree per ha with survival rate of more than 85%shall be submitted. Photographic evidence must be created and submitted periodically including NRSA reports in case of expansion projects. A shrub layer beneath tree layer would serve as an effective sieve for dust and sink for CO2 and other gaseous pollutants and hence a stratified green belt should be developed.
2.	Over and above the green belt, as carbon sink, plan for additional plantation shall be drawn by identifying blocks of degraded forests, in close consultation with the District Forests Department. In pursuance to this the project proponent shall formulate time bound Action Plans along with financial allocation and shall submit status of implementation to the Ministry every six months
Socio-economic activities	
1.	Socio-economic study of the study area comprising of 10 km from the plant site shall be carried out through a reputed institute / agency which shall consist of detail assessment of the impact on livelihood of the local communities.
2.	Action Plan for identification of local employable youth for training in skills, relevant to the project, for eventual employment in the project itself shall be formulated and numbers specified during construction & operation phases of the Project.
3.	If the area has tribal population, it shall be ensured that the rights of tribals are well protected. The project proponent shall accordingly identify tribal issues under various provisions of the law of the land.
4.	A detailed CER plan along with activities wise break up of financial commitment shall be prepared in terms of the provisions OM No. 22-65/2017-IA.III dated 30.09.2020.CER component shall be identified considering need based assessment study and Public Hearing issues. Sustainable income generating measures which can help in upliftment of affected section of society, which is consistent with the traditional skills of the people shall be identified.
5.	While formulating CER schemes it shall be ensured that an in-built monitoring mechanism for the schemes identified are in place and mechanism for conducting annual social audit from the nearest government institute of repute in the region shall be prepared. The project proponent shall also provide Action Plan for the status of implementation of the scheme from time to time and dovetail the same with any Govt. scheme(s). CERdetails done in the past should be clearly spelt out in case of expansion projects.
6.	R&R plan, as applicable, shall be formulated wherein mechanism for protecting the rights and livelihood of the people in the region who are likely to be impacted, is taken into consideration. R&R plan shall be formulated after a detailed census of population based on socio economic surveys who were dependant on land falling in the project, as well as, population who were dependant on land not owned by them.

7.	Assessment of occupational health and endemic diseases of environmental origin in the study area shall be carried out and Action Plan to mitigate the same shall be prepared.
8.	Occupational health and safety measures for the workers including identification of work related health hazards shall be formulated. The company shall engage full time qualified doctors who are trained in occupational health. Health monitoring of the workers shall be conducted at periodic intervals and health records maintained. Awareness programme for workers due to likely adverse impact on their health due to working in non-conducive environment shall be carried out and precautionary measures like use of personal equipments etc. shall be provided. Review of impact of various health measures undertaken at intervals of two to three years shall be conducted with an excellent follow up plan of action wherever required.
Corporate Environment Policy	
1.	Does the company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
2.	Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
3.	What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions. Details of this system may be given.
4.	Does the company has compliance management system in place wherein compliance status along with compliances / violations of environmental norms are reported to the CMD and the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA report.
Miscellaneous	
1.	All the above details should be adequately brought out in the EIA report and in the presentation to the Committee.
2.	Details of litigation pending or otherwise with respect to project in any Court, Tribunal etc. shall invariably be furnished.
3.	In case any dismantling of old plants are envisaged, the planned land use & land reclamation of dismantled area to be furnished.
Additional TOR for Coastal Based Thermal Power Plants Projects (TPPs)	
1.	Low lying areas fulfilling the definition wetland as per Ramsar Convention shall be identified and clearly demarcated w.r.t the proposed site.
2.	If the site includes or is located close to marshy areas and backwaters, these areas must be excluded from the site and the project boundary should be away from the CRZ line. Authenticated CRZ map from any of the authorized agencies shall be submitted.
3.	The soil levelling should be minimum with no or minimal disturbance to the natural drainage of the area. If the minor canals (if any) have to be diverted, the design for diversion should be such that the diverted canals not only drains the plant area but also collect the volume of flood water from the surrounding areas and discharge into marshy areas/major canals that enter into creek. Major canals should not be altered but their embankments should be strengthened and desilted.
4.	Additional soil required for levelling of the sites should as far as possible be generated within the site itself in such a manner that the natural drainage system of the area is protected and improved.
5.	Marshy areas which hold large quantities of flood water to be identified and shall not be disturbed.

6.	No waste should be discharged into Creek, Canal systems, Backwaters, Marshy areas and seas without appropriate treatment. Wherever feasible, the outfall should be first treated in a Guard Pond and then only discharged into deep sea (10 to 15 m depth). Similarly, the Intake should be from deep sea to avoid aggregation of fish and in no case shall be from the estuarine zone. The brine that comes out from Desalinization Plants (if any) should not be discharged into sea without adequate dilution.
7.	Mangrove conservation and regeneration plan shall be formulated and Action Plan with details of time bound implementation shall be specified, if mangroves are present in Study Area.
8.	A common Green Endowment Fund should be created by the project proponents out of EMP budgets. The interest earned out of it should be used for the development and management of green cover of the area.
9.	Impact on fisheries at various socio economic level shall be assessed.
10.	An endowment Fishermen Welfare Fund should be created out of CER grants not only to enhance their quality of life by creation of facilities for Fish Landing Platforms / Fishing Harbour / cold storage, but also to provide relief in case of emergency situations such as missing of fishermen on duty due to rough seas, tropical cyclones and storms etc.
11.	Tsunami Emergency Management Plan shall be prepared wherever applicable and Plan submitted prior to the commencement of construction work.
12.	There should not be any contamination of soil, ground and surface waters (canals & village pond) with sea water in and around the project sites. In other words necessary preventive measures for spillage from pipelines, such as lining of Guard Pond used for the treatment of outfall before discharging into the sea and surface RCC channels along the pipelines of outfall and intake should be adopted. This is just because the areas around the projects boundaries could be fertile agricultural land used for paddy cultivation.

3.4. Agenda Item No 4:

3.4.1. Details of the proposal

2x800 MW Coal based Ultra Super Critical Thermal Power Project (TPP) at Village Dadri Khurd, Tehsil, Mirza pur Sardar, District Mirzapur, Uttar Pradesh by Mirzapur Thermal Energy (UP) Private Limited (MTEUPPL). by **MIRZAPUR THERMAL ENERGY (UP) PRIVATE LIMITED** located at **MIRZAPUR,UTTAR PRADESH**

Proposal For		Fresh EC	
Proposal No	**File No**	**Submission Date**	**Activity (Schedule Item)**
IA/UP/THE/542333/2025	J-13012/12/2011-IA.II (T)	19/07/2025	Thermal Power Plants (1(d))

3.4.2. Project Salient Features

Agenda No. 28.4

28.4 Proposed 2x800 MW Coal based Ultra Super Critical Thermal Power Project (TPP) by **M/s Mirzapur Thermal Energy (UP) Private Limited (MTEUPPL)** located at Village Dadri Khurd, Tehsil, Mirzapur Sardar, **District Mirzapur, Uttar Pradesh - Environmental Clearance-regarding.**

[Proposal No. IA/UP/THE/542333/2025, F.No. J-13012/12/2011-IA.II (T)]

28.4.1: M/s. Mirzapur Thermal Energy (UP) Private Limited (MTEUPPL), a subsidiary of Adani Power Limited, has made an online application vide proposal no. IA/UP/THE/542333/2025 Dated 26/06/2025 along with copy of EIA/EMP report, Form and seeking Environment Clearance (EC) under

the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at item no. 1(d) Under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level. The project do not attract the provisions of general condition of the EIA Notification, 2006.

Name of the EIA consultant: M/s Gaurang Environmental Solutions Pvt. Ltd. Certificate No. NABET/EIA/2326/RA 0338 Valid up to: 07.12.2026.

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

28.4.2: The Project Site for instant proposal was earlier accorded EC by MoEF&CC vide letter no. J-13012/12/2011-IA.II(T) dated 21.08.2014 and CTE was obtained from UPPCB. The Hon'ble National Green Tribunal vide its judgement dated 21.12.2016 in the matter Appeal No 79 of 2014 titled as Debadityo Sinha vs. Mirzapur Energy (UP) Pvt. Ltd. & Others quashed the EC dated 21.08.2014 and the project could not be implemented further and the validity of the EC got lapse. Meanwhile, the project was acquired by Mirzapur Thermal Energy (UP) Private Ltd., a subsidiary of Adani Power Limited (APL) and submitted a fresh proposal for grant of EC by de-novo under the provisions of the EIA Notification, 2006.

28.4.3: The project by M/s Mirzapur Thermal Energy (UP) Private Limited (MTEUPPL) is located at Village Dadri Khurd, Tehsil Mirzapur Sadar, District Mirzapur, Uttar Pradesh, is for setting up a new power plant with a capacity of 2x800 MW coal-based Ultra Supercritical Technology.

28.4.4: Status of installation of Flue Gas Desulphurization shall be furnished as per the MoEF&CC Notification dated 11/07/2025:

28.4.5: The detail of the ToR is furnished as below:

Proposal No with date	Consideration	Details	Date of accord	ToR Validity
IA/UP/THE/467671/2024 dated 08/05/2024	10th meeting of EAC- Thermal held on 10.06.2024	Terms of Reference	29.07.2024	28.07.2028

28.4.6: Environmental site settings

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>1.</td><td>Total land</td><td>365.19 hectare
[Private: 333.81 ha; Govt.: 31.38 ha, Agriculture: 0.ha]</td><td></td></tr>
<tr><td>2</td><td>Land use break-up</td><td>
<table>
<tr><th>Facilities</th><th>Area (in hectares)</th></tr>
<tr><td>Main Plant</td><td>85.80</td></tr>
<tr><td>Coal Handling System</td><td>64.14</td></tr>
<tr><td>Water System</td><td>33.18</td></tr>
<tr><td>Switch Yard</td><td>NIL*</td></tr>
<tr><td>Green Belt</td><td>121.13</td></tr>
<tr><td>Roads (inside plant)</td><td>NIL*</td></tr>
<tr><td>Township</td><td>11.57</td></tr>
<tr><td>Ash Pond</td><td>49.37</td></tr>
<tr><td>Railway Siding</td><td>Not envisaged. Wagon Tippler/ Track hopper facili</td></tr>
</table>
</td><td>In addition to the 365.19 Ha, there is a Forest land Outside the Project boundary is 8.3581 Ha which includes water pipeline (5.8162 Ha) and approach road (2.5419 Ha). Forest proposal is under progress vide proposal no. FP/UP/THE/14236/2015.
The above approach road connects the project site with SH-5. Hence, the 8.3581 Ha of forest land as mentioned above is considered as a material component of the project as observed in the judgement dated 21/12/2016 of Hon'ble NGT in Appeal No 79 of 2014.</td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td></td><td>ty will be provided within the Plant</td></tr>
<tr><td>Water Supply Pipeline</td><td>Water Source from Ganga River and Intake point at Upper Khajuri Dam, about 32.6 Km from Plant boundary</td></tr>
<tr><td>Ash Transport Pipeline</td><td>NIL*</td></tr>
<tr><td>Others</td><td>NIL</td></tr>
<tr><td>Total</td><td>365.19</td></tr>
<tr><td colspan="2">* Included in main plant area</td></tr>
</table>
</td><td></td></tr>
<tr><td>3.</td><td>Land acquisition details as per MoEF&CC O.M, dated 7/10/2014 & 19/02/2025</td><td>The land is already in possession with Mirzapur Thermal Energy (UP) Private Limited except 31.38 Ha Govt Land. For 31.38 Ha land transfer and mutation is under progress at Revenue Dept, Vindhyachal Division, District Mirzapur Order No. 19957/2022 dated; 10.10.2024.</td><td>Land Documents are submitted along with EC application.</td></tr>
<tr><td>4.</td><td>Existence of habitation & involvement of R&R, if any.</td><td><u>Project site</u>: Name of village (if any) – Nil. No R&R.
Study Area:
<table>
<tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Garhawa</td><td>2.0 Km</td><td>Northeast</td></tr>
<tr><td>Ukhdand</td><td>2.1 Km</td><td>North of Northwest</td></tr>
<tr><td>Darhiram</td><td>2.6 Km</td><td>Northeast</td></tr>
<tr><td>Umaria</td><td>2.1 Km</td><td>North</td></tr>
<tr><td>Marihan</td><td>4.3 Km</td><td>Southwest</td></tr>
<tr><td>Dadri Khurd</td><td>1.36 Km</td><td>Southeast</td></tr>
<tr><td>Danti</td><td>1.0 Km</td><td>South of Southwest</td></tr>
<tr><td>Birohiya</td><td>2.28 Km</td><td>North</td></tr>
</table></td><td>R&R is not involved.</td></tr>
<tr><td>5</td><td>Existence of school and hospital if any.</td><td>A. <u>School</u>
Project site: NIL
Study Area: As Below
<table>
<tr><th>School</th><th>Distance (Km)</th><th>Direction</th></tr>
<tr><td>Ordial Institute Campus - Private educational institution, Danti,</td><td>1.35</td><td>SSW</td></tr>
<tr><td>Rajkiya Ashram Paddhati Balika Vidhyalaya, Danti,</td><td>2.4</td><td>S</td></tr>
<tr><td>Prathmik Vidyalaya- Umariya</td><td>2.8</td><td>NNE</td></tr>
</table>
B. <u>Hospital</u></td><td></td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>Project site: NIL
Study Area: As Below
<table>
<tr><th>School</th><th>Distance (Km)</th><th>Direction</th></tr>
<tr><td>CHC Marihan, Mirzapur - Government Hospital.</td><td>4.6</td><td>SSE</td></tr>
</table></td><td></td></tr>
<tr><td>6.</td><td>Latitude and Longitude of all corners of the project site.</td><td>A. Plant site
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>1</td><td>24°59'43.10"N</td><td>82°41'1.32"E</td></tr>
<tr><td>2</td><td>24°59'15.67"N</td><td>82°40'48.65"E</td></tr>
<tr><td>3</td><td>24°59'16.22"N</td><td>82°40'32.70"E</td></tr>
<tr><td>4</td><td>24°59'0.36"N</td><td>82°40'31.30"E</td></tr>
<tr><td>5</td><td>24°58'59.94"N</td><td>82°40'21.69"E</td></tr>
<tr><td>6</td><td>24°58'43.86"N</td><td>82°40'21.29"E</td></tr>
<tr><td>7</td><td>24°58'44.48"N</td><td>82°40'0.15"E</td></tr>
<tr><td>8</td><td>24°58'34.88"N</td><td>82°39'59.91"E</td></tr>
<tr><td>9</td><td>24°58'34.59"N</td><td>82°40'10.54"E</td></tr>
<tr><td>10</td><td>24°58'27.30"N</td><td>82°40'8.78"E</td></tr>
<tr><td>11</td><td>24°58'14.57"N</td><td>82°39'55.42"E</td></tr>
<tr><td>12</td><td>24°58'6.36"N</td><td>82°39'44.21"E</td></tr>
<tr><td>13</td><td>24°58'23.71"N</td><td>82°39'48.52"E</td></tr>
<tr><td>14</td><td>24°58'25.44"N</td><td>82°39'50.05"E</td></tr>
<tr><td>15</td><td>24°58'33.97"N</td><td>82°39'46.94"E</td></tr>
<tr><td>16</td><td>24°58'37.62"N</td><td>82°39'47.94"E</td></tr>
<tr><td>17</td><td>24°58'39.68"N</td><td>82°39'45.63"E</td></tr>
<tr><td>18</td><td>24°58'48.52"N</td><td>82°39'44.25"E</td></tr>
<tr><td>19</td><td>24°59'0.89"N</td><td>82°39'49.86"E</td></tr>
<tr><td>20</td><td>24°59'12.52"N</td><td>82°39'57.77"E</td></tr>
<tr><td>21</td><td>24°59'36.31"N</td><td>82°39'57.84"E</td></tr>
<tr><td>22</td><td>24°59'42.80"N</td><td>82°39'55.48"E</td></tr>
<tr><td>23</td><td>24°59'48.80"N</td><td>82°40'4.67"E</td></tr>
<tr><td>24</td><td>24°59'53.60"N</td><td>82°40'2.03"E</td></tr>
<tr><td>25</td><td>24°59'56.49"N</td><td>82°40'9.78"E</td></tr>
<tr><td>26</td><td>25° 0'1.35"N</td><td>82°40'14.57"E</td></tr>
<tr><td>27</td><td>25° 0'6.56"N</td><td>82°40'17.38"E</td></tr>
<tr><td>28</td><td>25° 0'4.58"N</td><td>82°40'23.19"E</td></tr>
<tr><td>29</td><td>25° 0'9.45"N</td><td>82°40'25.50"E</td></tr>
<tr><td>30</td><td>25° 0'10.07"N</td><td>82°40'24.11"E</td></tr>
<tr><td>31</td><td>25° 0'14.85"N</td><td>82°40'26.43"E</td></tr>
<tr><td>32</td><td>25° 0'14.09"N</td><td>82°40'28.29"E</td></tr>
<tr><td>33</td><td>25° 0'15.05"N</td><td>82°40'28.98"E</td></tr>
<tr><td>34</td><td>25° 0'9.57"N</td><td>82°40'42.06"E</td></tr>
<tr><td>35</td><td>25° 0'10.76"N</td><td>82°40'42.96"E</td></tr>
<tr><td>36</td><td>25° 0'4.33"N</td><td>82°40'49.13"E</td></tr>
<tr><td>37</td><td>25° 0'0.20"N</td><td>82°40'46.22"E</td></tr>
<tr><td>38</td><td>24°59'58.98"N</td><td>82°40'51.13"E</td></tr>
<tr><td>39</td><td>24°59'57.20"N</td><td>82°40'50.02"E</td></tr>
<tr><td>40</td><td>24°59'54.74"N</td><td>82°40'55.39"E</td></tr>
<tr><td>41</td><td>24°59'49.00"N</td><td>82°40'51.94"E</td></tr>
<tr><td>42</td><td>24°59'45.52"N</td><td>82°40'55.23"E</td></tr>
<tr><td>43</td><td>24°59'43.90"N</td><td>82°40'53.55"E</td></tr>
</table></td><td></td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>B. Ash pond
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>24°59'52.57"N</td><td>82°40'18.16"E</td></tr>
<tr><td>B</td><td>25° 0'5.61"N</td><td>82°40'18.27"E</td></tr>
<tr><td>C</td><td>25° 0'4.65"N</td><td>82°40'23.03"E</td></tr>
<tr><td>D</td><td>25° 0'9.40"N</td><td>82°40'25.52"E</td></tr>
<tr><td>E</td><td>25° 0'10.13"N</td><td>82°40'24.16"E</td></tr>
<tr><td>F</td><td>25° 0'14.84"N</td><td>82°40'26.44"E</td></tr>
<tr><td>G</td><td>25° 0'14.10"N</td><td>82°40'28.34"E</td></tr>
<tr><td>H</td><td>25° 0'15.10"N</td><td>82°40'29.03"E</td></tr>
<tr><td>I</td><td>25° 0'9.56"N</td><td>82°40'42.06"E</td></tr>
<tr><td>J</td><td>25° 0'10.73"N</td><td>82°40'42.99"E</td></tr>
<tr><td>K</td><td>25° 0'4.36"N</td><td>82°40'49.10"E</td></tr>
<tr><td>L</td><td>25° 0'0.20"N</td><td>82°40'46.18"E</td></tr>
<tr><td>M</td><td>25° 0'0.13"N</td><td>82°40'49.58"E</td></tr>
<tr><td>N</td><td>24°59'58.97"N</td><td>82°40'51.13"E</td></tr>
<tr><td>N</td><td>24°59'57.17"N</td><td>82°40'50.05"E</td></tr>
<tr><td>O</td><td>24°59'54.77"N</td><td>82°40'55.43"E</td></tr>
<tr><td>P</td><td>24°59'52.43"N</td><td>82°40'53.24"E</td></tr>
</table></td><td></td></tr>
<tr><td>7.</td><td>Elevation of the project site</td><td>Minimum: 169 m AMSL
Maximum: 214 m AMSL
Average: 193 m AMSL</td><td></td></tr>
<tr><td>8.</td><td>Involvement of Forest land if any.</td><td>No forest land is involved within Project /Plant Area. NOC regarding non-involvement of forest land has been issued by Forest Office Mirzapur vide letter no. 4229/Mirzapur/15 dated 30.05.2025.</td><td>However, Forest land Outside the Project boundary is 8.3581 Ha which includes water pipeline (5.8162 Ha) and approach road (2.5419 Ha). Forest proposal is under progress vide proposal no. FP/UP/THE/14236/2015</td></tr>
<tr><td>9.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td><u>Project site: Nil</u>
Study area:
<table>
<tr><th>S.No</th><th>Particulars</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td>1</td><td>Unnamed Seasonal Nala</td><td>Adjacent to the site</td><td>W</td></tr>
<tr><td>2</td><td>Jogldari Nala</td><td>1.9</td><td>SE</td></tr>
<tr><td>3</td><td>Jamthwa Nadi</td><td>2.2</td><td>WSW</td></tr>
<tr><td>4</td><td>Pahiti Nadi</td><td>3.6</td><td>NNE</td></tr>
<tr><td>5</td><td>Kuardari Nadi</td><td>6.0</td><td>W</td></tr>
<tr><td>6</td><td>Amjhar Nala</td><td>6.4</td><td>WSW</td></tr>
<tr><td>7</td><td>Upper Khajuri Dam</td><td>6</td><td>W</td></tr>
<tr><td>8</td><td>Dhenkwan Dam</td><td>6.2</td><td>E</td></tr>
<tr><td>9</td><td>Imiliya Bandhwa</td><td>9.82</td><td>E</td></tr>
</table>
*Source: - All distances are taken with respect to S.O.I. Toposheet, which is pertinent to this project.</td><td>.</td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>10.</td><td>Existence of ESZ/ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area</td><td><u>Study area</u>
Name of the ESZ/ESA: Nil
Status of Notification: NA
Distance of project from ESZ/ESA: NA
Authenticated map of ESZ projecting distance of ESZ from project site: NA
Status of NBWL approval: NA
List of Reserved and Protected Forests:
<table>
<tr><th>S. No.</th><th>Particulars</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td colspan="4">RF/PF</td></tr>
<tr><td>1</td><td>Mirzapur RF</td><td>Adjoining</td><td>SE</td></tr>
<tr><td>2</td><td>Danti RF</td><td>Adjoining</td><td>N</td></tr>
<tr><td>3</td><td>R.F. (Lodhpur)</td><td>4.0</td><td>NE</td></tr>
<tr><td>4</td><td>Patehra RF</td><td>5.6</td><td>SW</td></tr>
<tr><td>5</td><td>Sarson R.F.</td><td>5.6</td><td>SE</td></tr>
<tr><td>6</td><td>Dhanuhaw Pahar</td><td>5.8</td><td>ESE</td></tr>
<tr><td>7</td><td>Chacdlewakhurd R.F.</td><td>6.8</td><td>NE</td></tr>
<tr><td>8</td><td>Danti R.F.</td><td>6.9</td><td>NW</td></tr>
<tr><td>9</td><td>Karaunda R.F.</td><td>6.9</td><td>WSW</td></tr>
<tr><td>10</td><td>Malua R.F.</td><td>7.5</td><td>SW</td></tr>
<tr><td>11</td><td>Purainiyan R.F.</td><td>7.0</td><td>SE</td></tr>
<tr><td>12</td><td>Golhanpur R.F.</td><td>7.0</td><td>E</td></tr>
<tr><td>13</td><td>R.F. (Atraura)</td><td>8.1</td><td>N</td></tr>
<tr><td>14</td><td>Matihani R.F.</td><td>9.0</td><td>ESE</td></tr>
<tr><td>15</td><td>Patehar R.F.</td><td>9.2</td><td>WSW</td></tr>
<tr><td>16</td><td>Barkachhar R.F.</td><td>9.8</td><td>NW</td></tr>
</table>
No National Park, Sanctuary, Elephant/Tiger Reserve, or migratory routes/wildlife corridor exists within 10 km of the TPP.</td><td></td></tr>
<tr><td>11.</td><td>Archaeological sites monuments/ historical temples etc.</td><td>There are no Archaeological sites present within study area.</td><td></td></tr>
<tr><td>12.</td><td>Facility envisaged in CRZ area (Only for coastal power plant)</td><td>Name of the facility in CRZ area – Nil
Recommendations of CZMA – NA
Status of CRZ clearance – NA</td><td></td></tr>
<tr><td>13.</td><td>Involvement Of Critically Polluted Area/Severely Polluted area as per 2018 CEPI score</td><td>Involvement of CPA/SPA: Nil
Proximity to CPA/SPA: - Nil</td><td></td></tr>
</table>

28.4.7: The unit configuration and capacity of proposed project is given as below:

Sr. No.	Existing power plant configuration and capacity	Proposed power plant configuration and capacity	Total	Technology adopted
1	Nil	1600 (2x800) MW	1600 MW	Ultra Super Critical

28.4.8: The details of the fuel (Coal/LDO) requirement for the proposed project/ expansion cum proposed project along with its source and mode of transportation is given as below:

Details	Fuel requirement (MTPA)	Source	Distance from site (Kms)	Mode of Transportation	Coal characteristics (Worst case scenario)	Linkage document
Coal	6.4 (85% PLF)	Coal Mines of NCL / SECL / CCL & Commercial Coal Mines and e-auction.	Approx 200 Km	Rail	Ash <40 (%) Sulphur <0.50 (%) Moisture-13 (%) GCV - 3200-4300 Kcal/Kg	FSA and E-auction
LDO/ HSD	15000 KL per Annum	Local Market/ Vendors	Approx. 40 Km	Road	Low Sulphur (3-5% mass)	Local Vendors

28.4.9: The water requirement for the proposed project is estimated as 76,800 m^3/day, out of which 76,800 m^3/day of fresh water requirement will be meet from the Ganga River. The Permission for drawl of surface water is obtained from WRD Uttar Pradesh for 36 MCM/Year (98,630 m^3/day) vide letter no. 3613/11-27-C.0-4-174/11 dated 09.10.2011. The water will be transported to the plant site through the pipeline. The specific water consumption for the proposed power plant will be <2.5 m^3/MWhr.

28.4.10: The power requirement for the proposed project is estimated as 7.5 MW during Construction Phase and will be obtained from nearby UP Electricity Board Sub-station.

28.4.11: Baseline Environmental Studies

<table>
<tr><th>Period</th><th colspan="2">October' 2024 to December 2024</th><th>Additional study (if any)</th></tr>
<tr><td>AAQ parameters at 11 Locations (min and max)</td><td colspan="2"><table><tr><th>Parameter</th><th>Min (µg/m^3)</th><th>Max (µg/m^3)</th></tr><tr><td>$PM_{2.5}$</td><td>22</td><td>41</td></tr><tr><td>PM_{10}</td><td>48</td><td>69</td></tr><tr><td>SO_2</td><td>4.7</td><td>10.5</td></tr><tr><td>NOx</td><td>3.7</td><td>11.8</td></tr><tr><td>CO</td><td>0.04</td><td>0.454</td></tr></table></td><td></td></tr>
<tr><td>Incremental GLC level</td><td colspan="2"><table><tr><th>Parameter</th><th>Maximum GLC</th></tr><tr><td>PM_{10}(µg/m^3)</td><td>0.323 at 550 meters downwind</td></tr><tr><td>$PM_{2.5}$(µg/m^3)</td><td>0.084 at 550 meters downwind</td></tr><tr><td>SO_2(µg/m^3)</td><td>7.74 at 550 meters downwind</td></tr><tr><td>NO_X(µg/m^3)</td><td>6.33 at 550 meters downwind</td></tr></table>Note:</td><td></td></tr>
</table>

<table>
<tr><th>Period</th><th>October’ 2024 to December 2024</th><th>Additional study (if any)</th></tr>
<tr><td>Ground water quality at 19 locations</td><td>pH: 6.69 to 7.79, Total Hardness (as CaCO3): 98 mg/l – 178 mg/l; Chlorides: 54 mg/l to 90 mg/l, Fluoride: BDL (Dl-0.1) mg/l, Heavy metals like Copper (as Cu) - BLQ(LOQ-0.01), Lead (as Pb) - BLQ (LOQ- 0.005), Cadmium (as Cd) - BLQ(LOQ-0.002), Chromium (as Cr) - BLQ (LOQ-0.02), Arsenic (as As) - BLQ (LOQ-0.005) and Mercury (as Hg)- BLQ(LOQ-0.001).</td><td></td></tr>
<tr><td>Surface water quality at 07 locations</td><td>pH 7.26 to 7.75, Dissolved Oxygen (DO): 4.9 to 7.3 mg/l and BOD: 4- 8 mg/l. COD from 10 to 23 mg/l</td><td></td></tr>
<tr><td>Effluent generation details and its treatment</td><td></td><td>The project is based on Zero Liquid Discharge (ZLD).</td></tr>
<tr><td>Noise levels Leq (Day and Night) at 11 locations</td><td>The Leq values for day time was observed to be 52.3 to 49.2 dB (A), while during night time 44.0 to 40.2 dB (A).</td><td></td></tr>
<tr><td>Traffic assessment study findings</td><td>•Traffic study has been conducted for one month.
•Traffic study has been conducted at State Highway-5 which is at an aerial distance of about 1km towards WSW.
•Transportation of coal will be done by Rail.
•The PCU is 525.5 PCU/day on State Highway-5 and level of service (LOS) is A.
<table>
<tr><th>Road</th><th>Volume (in PCU/Day)</th><th>Capacity (in PCU/Day)</th><th>Existing V/C Ratio</th><th>LOS</th><th>Performance</th></tr>
<tr><td>SH-5</td><td>525.5</td><td>15000</td><td>0.035</td><td>A</td><td>Excellent</td></tr>
</table>
PCU load after proposed project:
<table>
<tr><th rowspan="2">Road</th><th rowspan="2">Existing LOS</th><th colspan="4">Changed V/C and LOS after adding generated traffic from operational phase of proposed project</th></tr>
<tr><th>V</th><th>C</th><th>V/C</th><th>Modified LOS</th></tr>
<tr><td>S.H.-5</td><td>A ‘Excellent’</td><td>525.5 + 762 = 1287.5</td><td>15000</td><td>0.08</td><td>A ‘Excellent’</td></tr>
</table>
•Conclusion: The level of service will be A after including additional traffic due to the proposed project.</td><td></td></tr>
<tr><td>Soil Quality at 11 Locations</td><td>pH range 7.81 to 8.12; Electrical conductivity (EC); 174 to 184 mhos/cm; Calcium: 198 to 274 mg/kg; Sodium:67 to 97 mg/kg; potassium: 88 to 162 /kg/ha; Nitrogen: 10.3 to 11.3 kg/ha; Phosphorous: 11.4 to 13.5 mg/kg; Cation Exchange Capacity (CEC): 2 to 2.6 meg/100gm; Magnesium: 24 to 134 mg/kg; Organic Matter: 0.80% to 0.89 %</td><td></td></tr>
<tr><td>Flora and fauna</td><td>22 Schedule I Species found in the buffer zone during field survey and secondary sources. Out of 22 Schedule I Species, 10 are mammals, 6 are avifauna and 6 herpeto-fauna.</td><td>Certified list of Flora & Fauna is received from DFO Mirzapur vide letter no. 4226/</td></tr>
</table>

<table>
<tr><th>Period</th><th>October’ 2024 to December 2024</th><th>Additional study (if any)</th></tr>
<tr><td></td><td></td><td>Mirzapur/15 dated 30.05.2025. Wildlife Conservation Plan has been prepared and submitted for further approval to the State Forest department.</td></tr>
<tr><td>Hydrogeology study</td><td>The action plan to address the recommendation of the Hydrogeology report and Watershed management plan are as below:
<table>
<tr><th>Sl. No.</th><th>Recommendations</th><th>Action Plan</th></tr>
<tr><td>1</td><td>Since the TDS value in W-13 well was slightly above the acceptable TDS limit, it is recommended to monitor that the TDS levels in the discharged water meet regulatory requirements to prevent any negative environmental impact from the plant's operations</td><td>Water quality monitoring shall be done once a month through NABL accredited laboratory to monitor TDS Level.</td></tr>
<tr><td>2</td><td>As the value of hardness as CaCO, in W-l groundwater sample was found to be above acceptable limit but within the permissible limit, a need for ongoing monitoring and potential remediation efforts can be suggested in the report.</td><td>Water quality monitoring shall be done once in a month engaging NABL accredited laboratory to track hardness as CaCO3 content and corrective/preventive actions will be taken based on findings in the report.</td></tr>
<tr><td>3</td><td>By reviewing the report, it was found that the value of Calcium at W-l groundwater sample was found to be above acceptable limit but within permissible limits which may result in encrustation, the plant may take some preventive measures accordingly.</td><td>Regular monitoring of groundwater quality, particularly calcium concentration, will be conducted once a month through NABL accredited laboratory to monitor Calcium Level.
Periodic maintenance and descaling of pipelines, storage systems, and water-handling equipment will be done.</td></tr>
<tr><td>4</td><td>The maximum value pf alkalinity at W-13 groundwater sample falls above the 'acceptable limit' as per Indian Drinking Water Standards 10500:2012. It is recommended to suggest some preliminary treatment measures for ensuring operational efficiency of the plant.</td><td>Mirzapur TPP will initiate a routine water quality monitoring program, with monthly sampling and analysis of alkalinity and associated parameters through NABL accredited laboratory and corrective/preventive actions will be taken based on findings in the report.
In addition to above, Mirzapur TPP shall be using Surface water and ZLD will be Implemented</td></tr>
</table></td><td>Consultant details:
The hydrogeology study report has been prepared by M/s. Akshar Geo Services Pvt. Ltd & Vetted by NIT Delhi.</td></tr>
<tr><td>Impact study</td><td>Recommendations of study report:</td><td>Indian Institute</td></tr>
</table>

Period	October' 2024 to December 2024	Additional study (if any)
on biodiversity and aquatic ecology	• **Wildlife Protection**: Launch anti-poaching and forest protection measures; set up wildlife camps with communication tools • **Habitat Restoration**: Implement soil and moisture conservation, afforestation with native species, and green belt development • **Species Conservation**: Develop targeted plans for Schedule-I species like Felis chaus, Hyaena hyaena, Melursus ursinus, and others found in the buffer zone • **Community Engagement**: Promote eco-clubs, green brigades, and alternative livelihoods to reduce forest dependence • **Budget Allocation**: ₹148.02 Lakhs over 5 years for habitat management, fire control, awareness, and capacity building	of Social Welfare and Business Management, University of Calcutta in 2025.
Risk assessment study	Project specific risk assessment with respect to storage of LDO, furnace oil & coal storage and other hazardous chemicals is included in Final EIA-EMP Report. The appropriate preventive measures and necessary safeguards such as toxic and flammable gas detectors, alarm / interlock systems, breathing apparatus for working personnel, fire protection systems such as fire extinguishers, water curtain, fire water hydrants in place, the untoward consequences and the major risk due to the same could be eradicated.	Gaurang Environmental Solutions Pvt Ltd.
Marine Impact Assessment Study	Not Applicable	--

28.4.12: The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal	Remarks
1	Municipal Solid Waste	Plant Canteen	70.08 TPA	Collected; segregated using color coded waste bin, Organic waste converters (OWC)	Inorganic will be disposed via local municipal authorized vendor & Organic/ Biodegradable waste by OWC.	-
2	E-waste	IT & Telecom Equipment	~2.0 TPA	Collected; segregated	Registered Recycler vendor	
3	Battery waste from UPS	Automotive & Industrial	~3 TPA	Collected; segregated	Authorized Vendor	
4	Bio medical waste	First aid center	0.02 TPA	Collected; segregated	Authorized vendor	
5	Hazardous Waste	Plant Operation	Used/ Spent Oil – 60 TPA, Waste or residues Empty Bar		Registered Recyclers/ Pre-processors with SPCB & Authorized Recyclers	

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal	Remarks
			rels/ Containers/ Contaminated Liners – 12 TPA containing oil – 10.0 TPA			

28.4.13: Public Consultation:

The public hearing was conducted on 11.04.2025 at Near Upper Primary School, Madihaan Market, Madihaan Tehsil and District Mirzapur (U.P).

Details of advertisement given	1. The Indian Express dated 07.03.2025 2. Amar Ujala dated 07.03.2025
Date of public consultation	Date: 11.04.2025, Thursday, 11:00 AM onwards
Venue	Near Upper Primary School, Madihaan Market, Madihaan Tehsil and District Mirzapur.
Presiding Officer	1. Sri S.P Shukla, Additional District Magistrate, Mirzapur 2. Sri R.K Singh, Regional Officer, U P. Pollution Control Board, Sonbhadra
Major issues raised	During the public hearing, stakeholders 100% supported the project, recognizing its potential to catalyze regional development. Key suggestions included giving priority in employment to local residents, supporting educational infrastructure (including smart classrooms), and addressing drinking water concerns through bore well installations. The public also appreciated the company's initiatives in community health, sports, and infrastructure, and requested their continuation.
No. of people attended	• 14 No. Verbal representation • 50 No. Written Representation/ Responses received from local people/villagers 2 No. Written Representations received through UPPCB Office after the Public Hearing

Summary of needs highlighted during the public consultation:

Category	Key Concerns Raised	Responses Provided
Local Development	During the public hearing, the public was in full support for the proposed Project	We have assured the public that 'development will be done in the project area on priority basis through CER/CSR activities
Employment	Employment Opportunity	The company is committed to providing preference to locals based on their educational qualification and experience. MTEUPPL through Adani foundation proposes to focus on development of the project area in the following areas under the Socio-EMP (CER) initiative. Education Community Health & Sustainability Livelihood Development.

Action plan as per MoEF&CC O.M. dated 30/09/2020 to address the concerns of public consultation:

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
A	Educational Initiatives						
	Modernization, Repair & construction/ maintenance of identified **Primary / Higher Secondary School of**	0.5	0.75	0.75	0.75	0.75	3.50

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
	nearby villages of the project site in consultation with Local Government/ School Authorities in villages Dadri Kh						

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
	urd & Madihan.						
	Distribution of drinking water filters/ Drinking water coolers in schools in near by villages.	0.35	0.35	0.35	0.35	0.35	1.75

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
	Basic teaching and learning infrastructure support to Govt. Schools, Supporting in creation of assembly halls, prayer	0.5	0.75	0.75	0.75	0.75	3.50

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
	halls, classrooms and smart class, computer room, space for mid-day meals, playground, school boundary walls						

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
	etc. for government schools in villages Kotwa Pandey, Sukhnai, Devari Kalan.						
	Providing scholarships to merit	0.23	0.23	0.23	0.23	0.23	1.15

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
	orious students						
	Online courses for students in emerging technologies such as Artificial Intelligence, Electric Vehic	0.25	0.25	0.25	0.25	0.25	1.25

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
	les, Renewable Energy etc. to equip students with job-ready skills through Adani Skill Development Centre (ASDC).						

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
	Sub Total	1.6	2.35	2.6	2.6	2.6	11.75
B	Community Health Initiatives						
	Providing assistance for the construction & operation of Primary Health Centre equipped with	0.50	0.75	0.95	1.00	1.00	4.20

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
	necessary facilities and other health centers in Village Patewar & other nearby villages of MTEUPPL in consultatio						

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
	n with local government authorities.						
	Rural Medical Camps through Medical Team of Primary Health Centre , Safe M	0.40	0.80	0.80	0.5	0.5	3.00

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
	enstrual Hygiene Management Awareness, Mega Health Camp, Cataract Screening & Operation in nearby villages of						

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
	MTEUPPL.						
	Promotion of awareness of malnutrition and anemia, Safe Menstrual Hygiene Management Aware	0.12	0.12	0.12	0.62	0.62	1.60

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
	ness, Mega Health Camp, Cataract Screening & Operation in Madihan and nearby villages. Sanitary napkin vendi						

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
	ng & disposal machine, provision of Girls' Toilets with regular water supply facilities.						
	Promotion of Poshan Va	0.34	0.34	0.34	0.34	0.34	1.70

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
	tika at back yard of villagers & Project Suposhan.						
	Sub Total	**1.36**	**2.01**	**2.21**	**2.46**	**2.46**	**10.50**
C	**Sustainable Livelihood and Women Empowerment**						
	Skill Development Centre (SDC) to make	0.40	0.80	0.80	0.90	0.90	3.80

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
	the youth for achieving their Goals in life by becoming Skilled Professionals.						
	Development & Support for Drip irri	0.37	0.37	0.37	0.37	0.37	1.85

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
	gation, assistance for mushroom, vegetable cultivation and livestock management in core zone villages.						
	Sub Total	**0.77**	**1.17**	**1.17**	**1.27**	**1.27**	**5.65**

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
D	Community Infrastructure Development						
	Repairing, strengthening & Maintenance of Existing Roads in consultation with Gram Panchayats.	0.50	1.50	1.50	1.75	0.50	5.75
	To pr	0.20	0.20	0.20	0.20	0.20	1.00

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
	ovide facility for potable drinking water, and water supply system through over head tanks						
	Creation of clean and	0.30	0.30	0.40	0.40	0.35	1.75

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
	hygienic environment by proper drainage systems, community sanitation campaign, waste management awareness et						

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
	c. implementation of Swachch Bharat Initiative.						
	Upgradation & Renovation of sanitation facilities such as toilet	0.70	0.70	0.70	0.70	0.70	3.50

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
	s in schools with priority for girls.						
	Provision of solar street lighting/ panels in near by schools, local health centers	0.51	0.51	0.51	0.51	0.51	2.55

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
	of near by villages, green nurturing programs, plantation drives etc.						
	Sub Total	**2.21**	**3.21**	**3.31**	**3.56**	**2.26**	**14.55**
E	**Sports & Culture Development**						
	Promotion of sports f	0.25	0.25	0.25	0.25	0.25	1.25

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	**26-27**	**27-28**	**28-29**	**29-30**	
	or youth and women						
	Cultural activities for villagers	0.16	0.16	0.16	0.16	0.16	0.80
	Sub Total	**0.41**	**0.41**	**0.41**	**0.41**	**0.41**	**2.05**
F	Tree plantation in Govt. School and Com	**0.20**	**0.60**	**0.40**	**0.40**	**0.40**	**2.00**

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
	munity Health Centre in Villages Garhwa, Ukhdanda & Darhi Ram						
	Sub Total						
Total Budget		**6.55**	**9.75**	**10.1**	**10.7**	**9.4**	**46.50**

28.4.14: The capital cost of the proposed project is Rs. 18300 Crores and the capital cost for environmental protection measures is proposed as Rs.3012.39 Crores (Excluding cost towards addressal of Public Consultation issues). The annual recurring cost towards the environmental protection measures is proposed as Rs.32.12 Crores (Excluding cost towards addressal of Public Consultation issues). The employment generation from the proposed project (Operational Phase) is Permanent: 250, Contractual: 2600. The details of cost for environmental protection measures as follows:

S. No.	Item Description	EMP Cost (Rs. in Crores)	Recurring Cost (Rs. in Crores)
1	Air Pollution Control	2459.04	24.59
2	Noise Control	3.54	0.224
3	Water Pollution Control (Including RWH +Solar)	261.3	0.06
4	Ash Management	254.88	5.0
5	Environmental Monitoring & Management	21.83	0.25
6	Green Belt Development	11.80	2.0
7	Addressal of Public Consultation issues	46.5	4.65
	Total	**3058.89**	**36.77**

28.4.15: The proposed Greenbelt will be developed in 121.13 ha area which is about ~33.16 % of the total project area of 365.19 ha with total sapling of 302825 nos. A 10m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total number of 302825 saplings will be planted and nurtured in 121.13 ha in 5 years. The Capital Budget of 11.8 Crores and recurring budget is 2.0 Crores is earmarked for Greenbelt development.

28.4.16: Ash management

Details	Annual generation (MTPA)	Utilization (MTPA)	% of utilization	Balance quantity (MTPA)	No. of storage silos with capacity
Ash (Fly & Bottom)	**2.56**	2.56	100	0	6 x 2500MT

Ash Pond details: -

S.No.	Details of Ash Pond	Ash pond
1.	Area (Ha)	49.37 Ha
2.	Dyke height (m)	15
3.	Volume (m^3)	74 Lac m^3
4.	Quantity of ash to be disposed (Metric Tons)	88.8 Lac MT
5.	Expected life of ash pond (number of years and months)	Capacity/life of ash dyke calculated for 20 years
6.	Type lining carried in ash pond: HDPE lining of LDPE lining or clay lining or No lining	HDPE
7.	Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD)	HCSD / MCSD

8.	Ratio of ash: water in slurry mix (1:_):	65 :35
9.	Ash water recycling system (AWRS): Yes or No	Yes
10.	Quantity of wastewater from ash pond to be discharged into land or water body (m^3)	0
11.	Details regarding dyke stability study and name of the organizati on who conducted the study:	N.A

Ash utilization plan –

S.No.	Activity (as applicable)	Quantity	Percentage
	Fly ash based products (bricks or blocks or til es or fiber cement sheets or pipes or boards or panels)	0.05	2%
	Cement manufacturing	2.05MTPA	80%
	Construction of roads, road and fly over em bankment	0.46 MTPA	18%
	Total	2.56 MTPA	100 %

28.4.17: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration is furnished as below:

Sl. No.	Case no.	Name of The Court	Brief Summary of the Case	Last Date of Hearing	Next Date of Hearing	Action taken by PP
1	29/2024 In appeal no- 79/ 2014	National Green Tribunal	In December' 2016, NGT judgement set aside the EC of the 13 20 MW TPP at Mirzapur and vide their judgment in May'2017, that Project proponent is at liberty to approach the MoEFCC or any other competent authority for processing of the applications for grant of EC upon making up for rectifying the defects and deficiencies pointed out in the judgment. However, the authorities concerned are at liberty to process the same in accordance with law while strictly adhering to the content of the judgment.	**14.07.2016**	**Disposed Off**	The Suggestions in the Order as well MoEFCC, we have taken all the adequate measures to comply.

Sl. No.	Case no.	Name of The Court	Brief Summary of the Case	Last Date of Hearing	Next Date of Hearing	Action taken by PP
2	883/2024	National Green Tribunal	Hon'ble National Green Tribunal has taken suo motu cognizance of the news item "Experts flag large-scale clearing of vegetation in Mirzapur forest" published in Hindustan Times on 03.07.2024 and has registered Original Application No. 883/2024 and started hearing. Hon'ble NGT has made "Mirzapur Thermal Energy (U.P.) Private Limited" as Respondent No. 5 by order dated 25/10/2024.	**21.07.2025**	The next date of hearing: 18.08.2025	Forest proposal is already submitted vide proposal no. FP/UP/THE/14236/2015 The Proposed Forest Diversion 8.3581 Ha is Outside the Project boundary, which includes water pipeline (5.8162 Ha) and approach road (2.5419 Ha). Stage-I clearance is awaited.
3	Execution Application no-29/2024 In appeal no-79/2014	National Green Tribunal	According to the appellant, by NGT order dated 21/12/2016 in Appeal No. 79/2014, the Environmental Clearance (EC) dated 21.08.2014 granted to the proposed Thermal Power Plant of Welspun Energy Private Limited was cancelled, and the Tribunal passed an order restraining respondent No. 4, M/s Welspun Energy (UP) Private Limited, from carrying out any development work at the project site and to restore the area to its original condition. Mirzapur Energy (UP) Private Limited was carrying out illegal construction activities at the site by clearing vegetation and forest and levelling the land using large-scale earth work. An application for ex-parte interim order has been filed by the appellant. Next Listing date fixed on 12.08.2025	**21.07.2025**	The next date of hearing: 18.08.2025	We have complied with all the stipulated conditions in TOR, Court Order as well EIA Notification 2006 & subsequent amendments, the following studies, NOCs/Certificates have been prepared & obtained. -Hydrogeology, Rainwater harvesting & Water Shed Management Plan. -Land use & Land Cover Study. -Action Plan for Greenbelt /plantation & Solar Power hasnessing. -Biodiversity (Ecological) Assessment Study & Wildlife Conservation Plan. -Need Based Assessment, Community Development /CSR Plan & Socio Impact Assessment Study -Water Source Sustainability Study. -Prepared list of nearby sensitive receptors viz; Forest, water bodies, Habitation, Schools, Health centers, Temples has been incorporated in EIA & EMP report, same will be

Sl. No.	Case no.	Name of The Court	Brief Summary of the Case	Last Date of Hearing	Next Date of Hearing	Action taken by PP
						implemented as recommended in study reports. -Public Hearing was conducted on 11.04.2025 as per the EIA notification. The action plan is prepared on the basis of PH proceedings and incorporated in the EIA report.

Compliance to the observation of Hon'ble NGT made in the Judgement dated 21/12/2026:

Sl. No.	Key Issues Addressed in the Judgment dated 21.12.2016	Compliance Status for 2x800 MW De-novo Application for Environment Clearance
	Change in Project Location and Manipulation of Form-I: o Originally proposed in Ghazipur, the location was shifted to Mirzapur. o Discrepancies in submission of Form-I (the foundational document for environmental appraisal). o Allegation that the Terms of Reference (ToR) were granted without proper or revised Form-I, undermining the EIA process. o Inconsistencies and procedural lapses in submission and verification of land use data.	A new reference for Environment Clearance for 1600 (2x800) MW is made through ***De-novo.*** Terms of Reference (ToR) is issued by the MoEFCC vide File No: J-13012/12/2011-IA. II (T) dated 29.07.2024. The Project location is at Village Dadri Khurd, Tehsil Mirzapur Sadar, District Mirzapur, Uttar Pradesh. The location of the Project is in accordance with the ToR granted.
	Land Use Misrepresentation: o The project site was misrepresented as barren land in Form-I and EIA report. o Records, including revenue documents and WAPCOS reports, show the land was fallow/agricultural/grazing and partially forested, not barren. o Misrepresentation influenced siting approval and violated siting criteria set by MoEF&CC.	**The Total Project area is 365.19 Ha.** **- Private Land: 333.81 Ha** **- Govt. Land: 31.38 Ha** The Status of land as industrial land (Power Project) as per the revenue records of Uttar Pradesh. The land is already in possession with Mirzapur Thermal Energy (UP) Private Limited except 31.38 Ha Govt Land. (31.38 Ha land transfer and mutation is under progress at Revenue Dept, Vindhyachal Division, District Mirzapur Order No. 19957/2022 dated; 10.10.2024). The Power Project is acquired along with land and infrastructure from Welspun Group in August'2019. Forest land Outside the Project boundary is 8.3581 Ha which includes water pipeline (5.8162 Ha) and approach road (2.5419 Ha). Forest proposal is under progress vide proposal no. FP/UP/THE/14236/2015 which is already disclosed with ToR Application.
	Forest land and Wildlife o Allegation of concealment of forest land within project and ancillary components (rail lines, pipeline, road). o Project area surrounded by several Reserved Forests; involvement of forest land not declared in Form-I or EIA.	**Forest Land:** - No forest land is involved within Project /Plant Area. NOC regarding non-involvement of forest land has been issued by Forest Office Mirzapur vide letter no. 4229/Mirzapur/15 dated 30.05.2025. - However, Forest land Outside the Project bou

<table>
<tr><th>Sl. No.</th><th>Key Issues Addressed in the Judgment dated 21.12.2016</th><th>Compliance Status for 2x800 MW De-novo Application for Environment Clearance</th></tr>
<tr><td></td><td>o Wildlife presence, including Schedule I species (e.g., Sloth Bear, Chinkara), was not properly assessed in the EIA.
o No proper biodiversity study conducted before EIA finalization; assessment conducted later, post-public hearing.</td><td>ndary is 8.3581 Ha which includes water pipeline (5.8162 Ha) and approach road (2.5419 Ha). Forest proposal is under progress vide proposal no. FP/UP/THE/14236/2015.
- The List of Reserved Forest/ Protected Forest within the study area is as below:
<table>
<tr><th>S. No.</th><th>Particulars</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td colspan="4">RF/PF</td></tr>
<tr><td>1</td><td>Mirzapur RF</td><td>Adjoining</td><td>SE</td></tr>
<tr><td>2</td><td>Danti RF</td><td>Adjoining</td><td>N</td></tr>
<tr><td>3</td><td>R.F. (Lodhpur)</td><td>4.0</td><td>NE</td></tr>
<tr><td>4</td><td>Patehra RF</td><td>5.6</td><td>SW</td></tr>
<tr><td>5</td><td>Sarson R.F.</td><td>5.6</td><td>SE</td></tr>
<tr><td>6</td><td>Dhanuhaw Pahar</td><td>5.8</td><td>ESE</td></tr>
<tr><td>7</td><td>Chacdlewakhurd R.F.</td><td>6.8</td><td>NE</td></tr>
<tr><td>8</td><td>Danti R.F.</td><td>6.9</td><td>NW</td></tr>
<tr><td>9</td><td>Karaunda R.F.</td><td>6.9</td><td>WSW</td></tr>
<tr><td>10</td><td>Malua R.F.</td><td>7.5</td><td>SW</td></tr>
<tr><td>11</td><td>Purainiyan R.F.</td><td>7.0</td><td>SE</td></tr>
<tr><td>12</td><td>Golhanpur R.F.</td><td>7.0</td><td>E</td></tr>
<tr><td>13</td><td>R.F. (Atraura)</td><td>8.1</td><td>N</td></tr>
<tr><td>14</td><td>Matihani R.F.</td><td>9.0</td><td>ESE</td></tr>
<tr><td>15</td><td>Patehar R.F.</td><td>9.2</td><td>WSW</td></tr>
<tr><td>16</td><td>Barkachhar R.F.</td><td>9.8</td><td>NW</td></tr>
</table>
Wildlife:
- The proposed project will not affect any Wild life corridor. Letter in this regard obtained from DFO Mirzapur Vide letter no. 4227/ Mirzapur/15 dated 30.05.2025.
- List of Schedule-1 species found in study area (22 nos.) has been provided by DFO Mirzapur vide letter no. 4226/Mirzapur/15 dated 30.05.2025.
- A detailed study on Biodiversity (Ecological) Assessment and Wildlife Conservation Plan has been conducted by Dept. of Environment, Indian Institute of Social Welfare and Business Management, University of Calcutta.</td></tr>
<tr><td></td><td>Deficiencies in Public Consultation Process:</td><td>The Public Hearing for the project is duly conducted by the Regional office, Uttar Pradesh Pollution Control Board (UPPCB), Sonbhadra & Mirzapur as per the EIA Notification 2006 and subsequent amendments on 11.04.2025 at near Upper Primary School, Madihan Market, Madihan Tehsil, Mirzapur.
The advertisements/notice regarding the Public Hearing were published in one National and Regional publications,
1. The Indian Express, Lucknow Edition dated 07.03.2025</td></tr>
</table>

Sl. No.	Key Issues Addressed in the Judgment dated 21.12.2016	Compliance Status for 2x800 MW De-novo Application for Environment Clearance
		2. Amar Ujala, Varanasi, Mirzapur Edition dated 07.03.2025 A copy of Draft EIA-EMP report with executive summary in English & Hindi was made available at the following offices: - MoEFCC, IRO Office Lucknow. - UPPCB, HO, Lucknow - UPPCB, RO - District Collectorate, Mirzapur - District Industries Centre, Mirzapur. - District Panchayat Office, Mirzapur. - Janpad Panchayat, Mirzapur. - Gram Panchayat, Dadhiram. Proper Announcement/ Munadi was conducted in nearby villages prior to Public Hearing (10.04.2025). The Action plan has been duly prepared to address the needs highlighted by the Public during the Public Hearing. A budget of Rs. 46.50 crore is earmarked for Socio EMP (CER) activities.
	Violation of Siting Criteria & MoEF Guidelines: o Ignored criteria: distance from forests, habitations, water bodies, and ecological sensitivity zones. o Guidelines require forest and prime agricultural land to be avoided for power plants.	The EIA Report has been prepared considering all sensitive features/ receptors within the study area and mitigation measures have been included in the Additional Study reports and budget allocation has been kept in EMP. The land was already provided by the local administration for setting up Thermal Power Plant in 2012.
	Environmental and Ecological Impacts Ignored:	Water Drawl from Upper Khajuri Dam: A detailed study on Water Source Sustainability is conducted and prepared by Dept. of Environment, Indian Institute of Social Welfare and Business Management, University of Calcutta. The conclusion of the study report is reproduced as under: *"In view of the total water requirement of 28 MCM/year for proposed thermal power plant unit and for the sustainability of the water source in the coming future, took on the study of Upper Khajuri dam water levels and water availability in the Upper Khajuri dam at the tapping point for the past 10 years for all the possible scenarios such as scanty rainfall months and lowest reservoir levels. Water availability in the Upper Khajuri dam has also been confirmed by the data provided by UPWRD, Mirzapur District and along with this efficacy and efficiency of the existing intake structure, pump house details and the pipeline used to deliver the raw water from the intake structure to the plant have also been studied by IISWBM. From all these studies and analysis of data via graphs and official government sources, it is found that water storage in the Upper Khajuri dam is always present in adequate amount and the level in the dam at the tapping point has always been above the dead storage level. Therefore, we can say that an adequate amount of raw water is available in the Upper Khajuri dam for all the possible scenarios. Moreover, the*

Sl. No.	Key Issues Addressed in the Judgment dated 21.12.2016	Compliance Status for 2x800 MW De-novo Application for Environment Clearance
		raw water can be easily pumped in the near future as per the provisions of adding pumps in accordance with the requirements of the intake structure as discussed above. Impact due to water withdrawal is also nil as even after maximum utilization of water from the Upper Khajuri dam by different sectors, the government of Uttar Pradesh will be still left with 2.44 MCM of water per year as a whole and 95.885 MCM of water per year if we go months as shown in Table 9.3 which can also be utilized for downstream ecology sustainability. ***Looking at the overall project scenario, it has been noticed that the project in totality considered environmentally safe."*** • Transportation of Coal will be through Rail with the guidelines of Coal India Limited. • Efforts will be made for 100% utilization of ash as per Fly Ash Notification, 31st December'2021 and its amendments. • An MoU has been signed with ACC Cement Limited and Ambuja Cement Limited for utilization of fly ash.
	Failure to Conduct Site Visit by EAC: o Though EAC earlier decided to conduct a site inspection, it relied solely on reports by State officials. o Lack of ground verification questions the objectivity of the appraisal process.	A Site visit/ inspection by the IRO office, MoEFCC, Lucknow on dated 25.02.2025 and the Status report along with site photographs were submitted to the MoEFCC vide letter dated 28.02.2025.
	Non-fulfillment of Procedural Requirements of EIA Notification, 2006: o Incomplete or non-compliant scoping, improper baseline data, and procedural violations during appraisal. o Tribunal emphasized that any concealment or misleading information at any stage-scoping. public consultation, or appraisal-vitiates the EC process.	The entire procedure in the current proposal has been adhered in full compliance with the EIA Notification, 2006 and its subsequent amendments. No information has been concealed at any stage, and all relevant data has been transparently presented. The EIA-EMP report contains complete details as per statutory requirements.
	Conclusion by the Tribunal o The NGT set aside the Environment Clearance dated 21.04.2014 granted to Welspun Energy (U.P.) Pvt. Ltd. o It directed that the project be appraised de novo, Le., a fresh appraisal following due process. o The judgment re-emphasized strict compliance with environmental safeguards, public participation, and precautionary principles under Section 20 of the NGT Act, 2010.	Complied. Mirzapur TPP has duly addressed all the observations of Hon'ble NGT. The proposal has changed from 2x660 MW to 2x800 MW and EC expired, a new reference (De Novo) has been initiated.

S. No	Issuing authority	Date	Reasons for the issuance of SCN	Status of reply submission	Present status
1	Not Applicable.				

Any violation case pertaining to the project on following: i. The Environment Protection Act, 1986 ii. Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980. iii. The Wildlife (Protection) Act, 1972	

28.4.18: Name of the EIA consultant: M/s Gaurang Environmental Solutions Pvt. Ltd. Certificate No. NABET/EIA/2326/RA 0338 Valid up to: 07.12.2026].

28.4.19: Public representations: Ministry is in receipt of public representation from different stakeholders regarding the instant project consideration. The issues stated in the representation and reply of the project proponent is furnished as below:

A) Representation from NGO

Sl. NO	Written representations/Issues	Response from Mirzapur TPP
-	In June 2024, the present proponent applied for a fresh EC. However, without awaiting its grant, they commenced large-scale illegal construction at the site. These activities included clearing and removing vegetation from forest land, extensive earthwork, land levelling, erection of boundary walls, construction of rooms, electric poles, etc. and construction of an unauthorised approach road through reserved forests. The project presently holds no valid EC, Forest Clearance. The Consent to Establish/Operate is also not valid given the change in project capacity from 1320 MW to 1600 MW.	**The contents of Para are not factual**. No construction activity has been undertaken at site in violation of EIA Notification. No project related activity has been undertaken at the project site except the activity as per MoEF&CC OM dated 29.03.2022. We hereby clarify that a temporary boundary wall was already constructed by previous company during the validity period of Environmental Clearance (EC) and Consent to Establish (CTE). No Construction activity related to Thermal power plant has been undertaken till date. Temporary repairing, painting and maintenance of existing plant boundary using precast wall segments and installed temporary GI sheets in certain areas solely to prevent encroachment on project land has been done.
1.	The MOEFCC And EAC Cannot Grant 'Ex-Post Facto' Environmental Clearance to This Project.	The contents of the para are not applicable, since no activity in violation of EIA notification has been undertaken.
A	Complaint to MoEFCC (28 June 2024) 1. A *suo motu* case initiated by the NGT's Principal Bench based on a news article in *Hindustan Times* dated 03.07.2024. [OA 883 of 2024] 2. A contempt petition filed by the original petitioner in relation to the NGT's judgment dated 21 December 2016. [EA 29 of 2024]	NGT hearing held on 18.08.2025, and Judgement order is awaited.
B	UPPCB Site Inspection Report (25 November 2025) The Uttar Pradesh Pollution Control Board (UPPCB) inspection recorded: *"During field visit at above concerned site, construction of pre-cast boundary wall and levelling work of ground was found under progress".* The UPPCB subsequently issued a notice to the proponent for carrying out establishment work without a valid Consent to Establish (CTE) on 30th November 2025.	The response to the same has already been submitted to UPPCB vide letter dated 25.02.2025. The content of the letter has already been detailed as above.
C	Continued construction Despite Pending NGT cases.	As already clarified, no construction activities have been undertaken except for those permitted in MoEFCC N

Sl. NO	Written representations/Issues	Response from Mirzapur TPP
		otification dated 29.03.2022. NGT hearing held on 18.08.2025, and Judgement order is awaited.
D	MoEFCC Regional Office Inspection Report (25 February 2025):- a) Boundary wall has been constructed all arou nd the project using precast boundary pillars/w alls and by using MS profile sheets (in undulat ed patches), 7 to 10 feet in height. b) Main gate installed using MS pipe/rods c) One security room constructed close to the main gate d) One abandoned well found during the inspe ction e) A rainwater storage pond with 30,000 m^3 (e qual to 3 Crore Liters) capacity has been const ructed in the southwest direction of the site f) Several MS portable site cabins fitted with S plit Air Conditioners g) One MS portable toilet available on site. h) Availability of industrial cables with woode n/plastic drums, and other materials i) Digging work for cable laying observed in s ome patches j) Readymade electricity poles with wires seen in working condition and leading to a nearby v illage. k) High tension wires also passed through proj ect land.	We hereby clarify that a temporary boundary wall was already constructed by previous company during the va lidity period of Environmental Clearance (EC) and Con sent to Establish (CTE). No Construction activity relate d to Thermal power plant has been undertaken till date. Temporary repairing, painting and maintenance of exis ting plant boundary using precast wall segments and in stalled temporary GI sheets in certain areas solely to pr event encroachment on project land has been done. The project was acquired from Welspun Group in Aug ust 2019 with Land along with available infrastructure. There are few existing transmission lines passing throu gh the project site, which have already been shown in t he layout plan.
2. Violation Of Van Adhiniyam 1980 By the Project Proponent		
A	Involvement of forest inside and outside of Pro ject Site. If the proposed project is established at this loc ation, all major ancillary components — inclu ding the railway line for coal transportation, w ater pipeline, transmission lines, and approach road — would necessarily pass through forest l and. This would require the project proponent t o obtain Forest Clearance (FC) for each compo nent before grant of EC and commencing any construction. This material fact was deliberatel y concealed when applying for fresh EC in 202 4, with the clear intention of evading FC under the Van Adhiniyam 1980 and creating a *fait ac compli*.	8.3581 Ha. of forest land (**Outside the project area**) is proposed for laying of water pipeline (5.8162 Ha.) and for approach road (2.5419 Ha.) for which forest clearan ce application was submitted vide proposal number FP/ UP/THE/14236/2015, which is already under progress and stage I clearance is awaited. The same was submitted to MoEFCC in all the proposa ls and the same has also been stipulated in ToR letter is sued by MoEFCC vide letter dated 29.07.2024.
	The land earmarked for the main thermal powe r plant lies within the Marihan Forest Range of the Mirzapur Forest Division, forming part of a contiguous forest landscape and a proposed Sloth Bear Conservation Reserve.	No forest land is involved within the project/ plant site. There is no notification published for the proposed proj ect area on Sloth Bear Conservation Reserve. We will adhere to all the Notifications/ Recommendation from t he MoEFCC/ State Forest/SPCB. The boundary wall of TPP has already been constructe d and all mitigations measures are proposed to be impl emented for prevention of Impact on Ecology.

Sl. NO	Written representations/Issues	Response from Mirzapur TPP
	The Survey of India toposheet submitted by th e proponent as part of the EC application — av ailable on the Parivesh portal also clearly indic ates forested areas within the site.	No forest land is involved within the project/ plant are a. NOC regarding non-involvement of forest land has b een issued by Forest office, Mirzapur vide letter no.- 4 229/Mirzapur/15 dated 30.05.2025 as well Khasra deta ils of the Project area has also been verified through re venue department (Tehsildar).
B	Violation Of Van Adhiniyam 1980 as observe d by the Undersigned and MoEFCC Regional Office:- I. Illegal Use of Forest Road for Heavy Vehicl e Transport and Encroachment on Forest Land. II. Suppression of FC Requirement for Railwa y Corridor and Transmission Line. III. Doubtful Conduct of Range Officer and Di visional Forest Officer, Mirzapur.	The Road is not in use by the Project proponent except regular patrolling/daily commute for site security purp ose. 8.3581 Ha. of forest land (**Outside the project area**) f or water pipeline (5.8162 Ha.) and approach road (2.54 19 Ha.) application was submitted vide proposal numb er FP/UP/THE/14236/2015, which is already under pro gress and stage I clearance is awaited.
3	**EIA Report Not Available in Public Domai n, Inadequate Public Consultation** A. **Non-Availability of EIA Report.**	Public hearing was conducted by UPPCB as per provis ion of EIA notification 2006 and its subsequent amend ments. Copy of Draft EIA report along with executive summar y in English & Hindi was submitted to following: - 1. MoEFCC, IRO Office Lucknow. 2. Member Secretary, UPPCB 3. Regional Office, UPPCB 4. Gram Panchayat, Dadhiram. 5. District Industries Centre, Mirzapur. 6. District Panchayat Office, Mirzapur. 7. DM, Mirzapur. 8. Janpad Panchayat, Mirzapur. Newspaper advertisement was published by UPPCB in Major Daily Viz. The Indian Express and Amar Ujala on 07.03.2025. Public announcement (Munaadi) was also done in near by villages to apprise the public for the public hearing.
	Draft EIA Report has not been made available on the MoEFCC website or the Parivesh Porta l. The same was not there even prior to the Pub lic Hearing, despite a formal representation bei ng submitted on the day of the hearing. The Fi nal EIA Report was accessible on the Parivesh Portal only after the undersigned filed an RTI application with MoEFCC on 31 July 2025, up on discovering that the project was scheduled f or consideration for grant of EC by the EAC o n 12 August 2025.	We have complied with all the directions by UPPCB a nd local administration. There is no provision of uploading Draft EIA report on the MoEFCC website or the Parivesh Portal as per the Appendix IV Para 2.3 and 2.4 of EIA notification. All the due procedure as laid in the EIA notification, A ppendix IV has been adhered to by UPPCB. The final EIA was uploaded online on PARIVESH Por tal which is accessible.
	B. Irregularities in Public Hearing	Public hearing was conducted by UPPCB as per provis ion of EIA notification 2006 and its subsequent amend ments. Copy of Draft EIA report along with executive summar y in English & Hindi was submitted to following: - 1. MoEFCC, IRO Office Lucknow. 2. Member Secretary, UPPCB

Sl. NO	Written representations/Issues	Response from Mirzapur TPP
		3. Regional Office, UPPCB 4. Gram Panchayat, Dadhiram. 5. District Industries Centre, Mirzapur. 6. District Panchayat Office, Mirzapur. 7. DM, Mirzapur. 8. Janpad Panchayat, Mirzapur. Newspaper advertisement was published by UPPCB in Major daily viz. The Indian Express and Amar Ujala o n 07.03.2025. Public announcement (Munaadi) was also done in near by villages to apprise the public for the public hearing.
	The Public Hearing was conducted in the com pound of a school in *Marihan*, far from the pro posed site in village Dadri Khurd. The two loc ations fall in different assembly constituencie s—Marihan and Majhawan, respectively	The Public Hearing venue was decided by DM, Mirzap ur and UPPCB, RO Sonbhadra keeping in view the mo st suitable/approachable and accessible location for pu blic. The venue is about 4.3 km from project site and th e location of well informed by the means of Newspaper advertisement and public announcements done before public hearing date (more than 30 days). The public hearing was conducted by ADM and RO, U PPCB in line with the provisions of EIA Notification, 2 006 and subsequent amendments.
4	Alternate Project Site Shall Be Explored Due To Significant Presence of Forests and Wildlif e.	The proposal has changed from 2x660 MW to 2x800 MW and EC expired, a new reference *(De Novo)* is bei ng made through this application for grant of EC.
5	Discrepancies On the Parivesh Portal, Affectin g Transparency and Accessibility Of Critical E nvironmental Information:- A. Two parallel proposal numbers creating confusion. B. Inconsistencies with date of uploads.	Proposal No. IA/UP/THE/467671/2024 for obtaining T oR (Granted) and Proposal No. IA/UP/THE/542333/20 25 is for EC application. All requisite documents were uploaded in respect of ap plication.

B) Representations

Sl.No.	Written representations	Point-wise Clarification/ Reply
1.	**E-mail received on 11.04.2025**	
	1. Lack of information: The affected villagers were not given any prior information. Village Dadri Khurd and the surro unding villages fall in the forest and hilly area under Mirzapur Forest Division. Newspapers d o not reach here and neither did anyone make a ny effort to give us any information at the villa ge level.	Public hearing was conducted by UPPCB as per provis ion of EIA notification 2006 and its subsequent amend ments. Copy of Draft EIA report along with executive summa ry in English & Hindi was submitted to following: - 2. Member Secretary, UPPCB 3. Regional Office, UPPCB 4. Gram Panchayat, Dadhiram. 5. District Industries Centre, Mirzapur. 6. District Panchayat Office, Mirzapur. 7. DM, Mirzapur. 8. Janpad Panchayat, Mirzapur. Newspaper advertisement was published by UPPCB in two newspaper publications (National & Vernacular) v

Sl.No.	Written representations	Point-wise Clarification/ Reply
		iz. The Indian Express and Amar Ujala on 07.03.2025. Public announcement (Munaadi) was also done in near by villages to apprise the public for the public hearing.
	2. Public hearing was held far away: This power plant is proposed in village Dadri K hurd which is in Tehsil 'Sadar' and Assembly C onstituency 'Majhawan', which have a different MLA. Whereas the public hearing was organise d in Tehsil 'Madihan' and Assembly Constituen cy 'Madihan', which are geographically and ad ministratively different from the project site. T he residents of village Dadri Khurd are directly affected by this project and hence it was necess ary that this public hearing be organised in villa ge Dadri Khurd or any nearby village so that w e villagers could express our views on the envir onmental impact of this project. But this did no t happen.	The Public Hearing venue was decided by DM, Mirza pur and UPPCB, RO Sonbhadra keeping in view the m ost suitable/approachable and accessible location for p ublic/people. The venue is about 4.3 km from project s ite and the location was well informed by the means of Newspaper advertisement and public announcements d one before public hearing date (more than 30 days). Public Hearing was conducted by UPPCB, RO Sonbha dra in Chairmanship of Additional District Magistrate (ADM) Mirzapur on 11.04.2025 as per the provision o f EIA notification 2006 and its subsequent amendment s.
	3. Termination in short time: When we got information about the public hear ing on the morning of 11 April 2025, we hurrie dly reached the public hearing venue at around 12 noon but by the time we reached the public hearing venue, we came to know that the public hearing had been ended in just half an hour and the company and administrative officials had le ft. But the signature campaign and tea and snac ks arrangements were going on there while no person from the company was present there fro m whom we could get information about the pr oject and tell our problems formally.	The Public Hearing commenced from 11:00 am by AD M & RO, UPPCB and was concluded by ADM and R O, UPPCB after public consensus in line with the prov isions of EIA Notification, 2006.
	4. Absence of real affected people and crowd o f outsiders: We also found out that the public hearing was l ed by Madihan MLA Ramashankar Patel who was sitting in the middle of the stage with gove rnment officials. Most of the people present at t he place where the public hearing was held wer e outsiders who were brought by Madihan ML A in buses, even though this project site does n ot fall under his jurisdiction. These people were neither informed about the environmental impa ct of this project nor were they given any infor mation related to this project, they were called only to mark their presence. At the same time, t he people who are actually affected by this proj ect, and live in Dadri Khurd and its nearby villa ges were not given any information about this p ublic hearing. It is also a matter of investigation that who were the people who gathered there th at day and for what purpose they were brought there.	Public Hearing was conducted by UPPCB, RO Sonbha dra in Chairmanship of ADM Mirzapur on 11.04.2025 at Village Marihaan located at about 4.3 km from proj ect site. Newspaper advertisements were published by UPPCB in Major daily viz. The Indian Express and Amar Ujal a on 07.03.2025. Public announcement (Munaadi) was also done in near by villages to apprise the public for the public hearing as per the provision of EIA notification 2006 and its su bsequent amendments.

Sl.No.	Written representations	Point-wise Clarification/ Reply
	5. Lack of Draft EIA Report: The Draft EIA report was neither made available on the public portal nor provided on demand. I also tried to lodge a complaint in this regard at the District Officer Mirzapur office, but neither our complaint was heard there nor the application was accepted. I also sent a complaint to Uttar Pradesh Pollution Control Board and other related departments through email, but did not receive any satisfactory reply.	Copy of Draft EIA-EMP report along with executive summary in English & Hindi was made available at the following places: - 1. MoEFCC, IRO Office Lucknow. 2. Member Secretary, UPPCB 3. Regional Office, UPPCB 4. Gram Panchayat, Dadhiram. 5. District Industries Centre, Mirzapur. 6. District Panchayat Office, Mirzapur. 7. DM, Mirzapur. 8. Janpad Panchayat, Mirzapur.
2	**E-mail received on 11.04.2025**	
	1. The Environmental Impact Assessment (Draft EIA) report has not been made public till now, whereas it is mandatory to publish it and make it available for public viewing before the environmental public hearing.	Public hearing was conducted by UPPCB as per provision of EIA notification 2006 and its subsequent amendments. Copy of Draft EIA report along with executive summary in English & Hindi was submitted to following: - 1. MoEFCC, IRO Office Lucknow. 2. Member Secretary, UPPCB 3. Regional Office, UPPCB 4. Gram Panchayat, Dadhiram. 5. District Industries Centre, Mirzapur. 6. District Panchayat Office, Mirzapur. 7. DM, Mirzapur. 8. Janpad Panchayat, Mirzapur. Newspaper advertisement was published by UPPCB in Major Daily viz. The Indian Express and Amar Ujala on 07.03.2025. Public announcement (Munaadi) was also done in nearby villages to apprise the public for the public hearing.
	2. This report was not made available on the Uttar Pradesh Pollution Control Board, Ministry of Forest and Environment or any public portal till 11th April 2025, 11:00 am.	
	3. Neither the information was published in local newspapers, nor was any publicity done at the village level, which raises questions on the transparency of the public hearing process.	
	4. When we went to meet the concerned officials, we were stopped from meeting them. This gives rise to the suspicion that the officials themselves are working against transparency.	
	5. Persons who are directly or indirectly connected with the project were invited as chief guests in the public hearing, thereby affecting impartiality.	
	6. This area is extremely sensitive from the environmental and biodiversity point of view, and the proposed project is likely to have serious effects on the local geo-ecology, water resources, forest land and rural life.	The proposal has changed from 2x660 MW to 2x800 MW and EC expired, a new reference **(*De Novo*)** is being made through this application for grant of EC Proposed project is based on advanced Ultra Super Critical Technology, which is more environment friendly and will be equipped with Highly efficient pollution control equipment's such as Electro-Static Precipitator (ESP), SCR, SOFA Dust Extraction and Suppression systems, STP, ETP etc. TPP shall be based on Zero Liquid Discharge (ZLD). Environment Impact Study along with Biodiversity Assessment study through Indian Institute of Social Welfare and Business Management, University of Calcutta. All mitigations measures are proposed to be implemen

Sl.No.	Written representations	Point-wise Clarification/ Reply
		ted for prevention of Impact on ecology, water resources, forest land and rural life.
	7. Earlier also, in the case of Welspun Energy Power Project, Mirzapur, violation of environmental rules had come to light, as a result of which the said project was cancelled by the National Green Tribunal (NGT).	As per NGT dispose order, all recommendations have been addressed and complied.
3	Newspaper Cuttings:	
		The newspaper cuttings referenced in the emails are **not from nationally recognized publications** and therefore lack credibility. Furthermore, the claims made in these cuttings are **entirely baseless and misleading**. We reaffirm that the **public hearing was duly conducted by the Uttar Pradesh Pollution Control Board (UPPCB)** chaired by the **ADM, Mirzapur**, as per the prescribed procedures and guidelines.
	4. Newspaper cutting heading as: (a) (b) 1600 (c) (d) :	

The above representations have been deliberated by the EAC along with Sh R K Singh, RO Mirzapur, UPPCB. During the meeting, it was informed by the representative of UPPCB that due process as per the EIA Notification, 2006 has been followed for the public hearing held on 11/04/2025.

28.4.20: Written submissions

The written submission made by the proponent during the meeting is furnished as below:

S.No	Additional Information Sought	Pointwise Reply/ Clarification
1	Compliance Status of the key issues Addressed in the NGT Order dated 21.12.2016.	The Compliance Status of key Issues Addressed in the NGT Order dated 21.12.2016 is furnished at para no. 28.4.17.
2	Point wise response to Written representations received through MoEFCC mail to be submitted.	The point wise response towards Written representations received from MoEFCC by Email is furnished at para no. 28.4.19.
3	Justification regarding categorization of TPP in terms of MoEFCC Notification dated 11/07/2025.	Mirzapur Thermal Power Plant is located about **19 KM** distance from the Mirzapur Town/City (DM office). The nearest CPA/SPA is Varanasi, distance is about **45.46 Km** as per the DSS portal, therefore Mirzapur TPP falls under the **"Category C"** as per MoEFCC Notification dated 11.07.2025.
4	The present status of Stage-I Forest Clearance to be provided.	8.3581 Ha of Forest Land is **Outside the Plant** Boundary for which Forest Proposal Application was filed in 2015 vide proposal no. FP/UP/THE/14236/2015. Stage-l approval is awaited and expected by 30th September 2025.

S.No	Additional Information Sought	Pointwise Reply/ Clarification
5	The GLC modelling has to be revisited.	The revised GLC Modelling report is furnished as above.

3.4.3. Deliberations by the committee in previous meetings

N/A

3.4.4. Deliberations by the EAC in current meetings

Observations and deliberation of the EAC

28.4.21: The Committee observed and noted the following:

i. Instant proposal is for seeking Environmental Clearance for setting up of 2x800 MW Coal based Ultra Super Critical Thermal Power Project (TPP) by M/s Mirzapur Thermal Energy (UP) Private Limited (MTEUPPL) located at Village Dadri Khurd, Tehsil, Mirzapur Sardar, District Mirzapur, Uttar Pradesh

ii. The Project Site for instant proposal was earlier accorded EC by MoEF&CC on 21.08.2014 and CTE was obtained from UPPCB. The Hon'ble National Green Tribunal vide its judgement dated 21.12.2016 in the matter Appeal No 79 of 2014 titled as Debadityo Sinha vs. Mirzapur Energy (UP) Pvt. Ltd. & Others quashed the EC dated 21.08.2014 and the project could not be implemented further and the validity of the EC got lapsed. Meanwhile, the project was acquired by Mirzapur Thermal Energy (UP) Private Ltd., a subsidiary of Adani Power Limited (APL) and submitted a fresh proposal for grant of EC by de-novo under the provisions of the EIA Notification, 2006.

iii. The EAC also took into consideration the drone survey of the project site and KML file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH portal.

iv. There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site as ascertained from DSS.

v. The project site is not located within the Critically Polluted Area (CPA) / Severally Polluted Area (SPA) as per CEPI assessment 2018 of CPCB.

vi. As per the categorization of CPCB, the proposed project do not fall within any CPA nor in any non-attainment cities as per MoEF &CC notification G.S.R. 465(E) dated 11/07/2025. Hence, it is classified as Category 'C' project with respect to FGD installation.

vii. ToR was granted vide letter dated 29.07.2024.

viii. Total land of 365.19 ha is required for the project. The land is already in possession with Mirzapur Thermal Energy (UP) Private Limited except 31.38 Ha Govt Land. For 31.38 Ha land transfer and mutation is under progress at Revenue Dept, Vindhyachal Division, District Mirzapur Order No. 19957/2022 dated 10.10.2024.

ix. In addition to the 365.19 Ha, there is a Forest land Outside the Project boundary is 8.3581 Ha which includes water pipeline (5.8162 Ha) and approach road (2.5419 Ha). Forest proposal is under progress vide proposal no. FP/UP/THE/14236/2015. The said approach road connects the project site with SH-5. Hence, the 8.3581 Ha of forest land is considered as a material component of the project as observed in the judgement dated 21/12/2016 of Hon'ble NGT in Appeal No 79 of 2014. Stage – I FC for 8.3581 ha is yet to be obtained by the project proponent.

x. It was apprised by the Member Secretary that instant proposal involves 8.3581 Ha of forest land for which requisite Stage I FC under the provisions of Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 is yet to be obtained. Further apprised that as per OM dated 09/09/2011, after the EAC has recommended the project for environmental clearance, it would be processed on file for obtaining decision of the Competent Authority for grant of environmental clearance. In the cases where the Competent Authority has approved the grant of environmental clearance, the proponent will be informed of the same and a time limit of 12 months will be given to submit the requisite Stage – I forestry clearance. On receipt of the same, formal EC letter will be issued by the Ministry.

xi. Total 22 Schedule I Species found in the buffer zone during field survey and secondary sources. Wildlife and conservation plan for schedule I species prepared and submitted for approval.

xii. Total fresh water requirement is 76800 KLD. Approval for drawing 98630 KLD of water for all 2 units from River Ganga has been obtained from WRD Uttar Pradesh vide letter dated 09/10/2011. The water will be transported to the plant site through pipeline.

xiii. The power requirement for the proposed project is estimated as 7.5 MW during Construction Phase and will be obtained from nearby UP Electricity Board Sub-station

xiv. 275 m high Chimney (Twin flue) is proposed and proponent will abide by and adhere to all the Notifications/ Directives issued by the MoEFCC from time to time regarding the TPP.

xv. Zero Liquid Discharge system will be adopted.
xvi. Transportation of coal will be done 100% by rail. No road transportation is involved.
xvii. The proposed Greenbelt will be developed in 121.13 ha area which is about ~33.16 % of the total project area of 365.19 ha with total sapling of 302825 nos. A 5m to 50 meter wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total number of 302825 saplings will be planted and nurtured in 121.13 ha in 5 years. The Capital Budget of 11.8 Crores and recurring budget is 2.0 Crores is earmarked for Greenbelt development. The Ash will be collected in dry form in silos for further utilization/transportation through rail wagons / closed trucks to adjacent Cement Plants. 100% Ash will be utilized as per Ash Notification dated 31/12/2021.
xviii. Ash pond is proposed in an area of 49.37 Ha for ash disposal.
xix. Public hearing for the project was held on 11/04/2025. The Committee looked in to the videography of the public hearing proceedings, deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory. The committee advised the PP to implement the PH action plan in a time bound manner.
xx. The capital cost of the proposed project is Rs. 18300 Crores and the capital cost for environmental protection measures is proposed as Rs.3012.39 Crores (Excluding cost towards addressal of Public Consultation issues). The annual recurring cost towards the environmental protection measures is proposed as Rs.32.12 Crores (Excluding cost towards addressal of Public Consultation issues). The employment generation from the proposed project (Operational Phase) is Permanent: 250, Contractual: 2600.
xxi. The Committee deliberated on the baseline data and incremental GLC due to the proposed project. The committee noted that the proponent is providing Electrostatic Precipitator (ESP), Low Nox Burner, SOFA technology and Dust Extraction & Suppression System to control the emission of Particulate matter and NOx and also stack with a height of 275 m will be provided to control & regulate the air emission from the proposed project.
xxii. Committee deliberated on the action plan of Hydrogeology study; Bio-diversity/aquatic ecology study and Risk assessment study and found it satisfactory.
xxiii. The committee noted that with respect to water pollution control, domestic wastewater will be treated in Sewage treatment plant and treated sewage water shall be reused. Effluent will be treated in ETP. There will be no effluent discharge from the premises, hence the ZLD will be maintained. A state-of-the-art roof top rain water harvesting system will be provided to collect the run -off for ground water recharging.
xxiv. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components.
xxv. There are two court cases pending before the Hon'ble NGT and the EAC asked the proponent to comply with the directives of the Hon'ble NGT.
xxvi. The Committee deliberated on the observations of Hon'ble NGT made in the Judgement dated 21/12/2016 in Appeal No 79 of 2014 titled as Debadityo Sinha vs. Mirzapur Energy (UP) Pvt. Ltd. & Others along with the compliance made by the proponent in this regard.
xxvii. The Committee deliberated on the public representations received for the project as well the reply furnished by the proponent.
xxviii. The EAC also deliberated on the written submission of the project proponent and found it satisfactory.
xxix. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
Recommendations of the Committee:
28.4.22: In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 **subject to uploading of written submission on PARIVESH Portal** and stipulation of the following specific conditions and general conditions based on project specific requirements:

3.4.5. Recommendation of EAC

Recommended (Subject to submission of requisite information/ documents)

3.4.6. Details of Environment Conditions

3.4.6.1. Specific

[A] Environmental Management

1.	Project proponent shall submit the Stage – I Forest Clearance for diversion of forestland of 8.3581 ha involved in the project for non-forestry activity prior to grant of Environment Clearance.
2.	The project proponent shall be abide by all orders and judicial pronouncements, made from time to time by the Hon'ble National Green Tribunal in Original Application No. 883/2024 and Execution Application no-29/2024 in appeal no.79/2014.
3.	Project proponent shall ensure that 100% utilization of ash generated from the project in accordance with the ash utilization notification dated 31/12/2021 and its subsequent amendment. Area for the proposed ash dyke shall not exceed 49.7 ha. as committed.
4.	Project proponent shall establish 4 Continuous Ambient Air Quality Monitoring Stations (CAAQMS) at suitable locations in and around project site in consultation with UPPCB within one year from the date of grant of EC.
5.	Project proponent shall comply with the recommendations made in the biodiversity assessment report and Hydrogeology report in a time bound manner. Compliance status in this regard shall be submitted to the Regional Office of MoEF&CC along with the six monthly compliance report.
6.	The water requirement for project is estimated as 76800 KLD and the same shall be met from Ganga River. The specific water consumption for unit 1 & 2 shall be less than 3.0 m3/MWhr.
7.	The entire coal requirement for 2 units of TPP (2x800 MW) shall be transported by rail network only and no road transportation is permitted.
8.	Project proponent shall store harvested rainwater in the project boundary and utilize the same for plantation, recharging water in the pond and domestic utilization in colonies. A record shall be maintained of water collected through rainwater and its supply system. PP shall get the water audit done every year to optimize the water requirement.
9.	Project proponent shall implement the protective measure proposed in EMP in a time-bound manner. The budget earmarked for the same is Rs. 3012.39 crores and should be kept in separate accounts and audited annually. The implementation status along with the amount spent with documentary proof shall be submitted to the concerned Regional Office for the activities carried out during the previous year.
10.	Project proponent shall assess the carbon footprint of the project and develop carbon sink/carbon sequestration resources using modern technologies. The implementation report shall be submitted to the concerned Regional Office of the MoEF&CC.
11.	Project proponent shall ensure that diesel operated vehicles will be switched over to E-Vehicles/CNG/LNG vehicles in a time bound manner, replace the passenger vehicles to E-vehicle/CNG vehicles in phased manner. Further, for local movement of officials, Contract of Vehicles deployment shall be awarded to Project affected people and all efforts for adopting heavy E-vehicles/CNG/LNG vehicles like Bulkers for ash transportation for short distance subject to availability of such E-vehicle and adequate charging infrastructure in the surrounding area shall be provided. PP shall submit the action taken report to concerned RO with amount spent, photographs (before & after), number of such non diesel vehicles deployed etc. in six monthly compliance report.
12.	The Project Proponent shall provide stack of 275 meters height and shall abide by the provisions of the notification number G.S.R 465 (E) dated 11/07/2025 related to FGD.
13.	Project proponent shall ensure that pipelines carrying the fly ash and effluent shall be inspected regularly for any leakages.
14.	Effluent of 1080 KLD will be treated through Effluent Treatment Plant. As committed by the Project proponent, Zero liquid discharge shall be adopted for the existing and the proposed plant. No wastewater will be discharged outside the project site.
15.	PP shall implement the concurrent plantation plan in a time bound manner. Total of 121.3 ha area (33% of total area of 365.19 ha) will be developed as greenbelt. A 5 m - 50 m wide greenbelt, consisting of at least 3 tiers

	around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines within 3 years. PP should annually submit the audited statement of expenditure along with proof of activities viz. photographs (before & after with geolocation date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC and on PARIVESH Portal as the case may be for the activities carried out during previous year.
16.	Project proponent shall carry out community plantation with incentive scheme by distributing 50,000 saplings of native and fruit bearing plants per year for a period of five years. Further, PP shall provide basic facilities to the nearby schools such as drinking water, sanitation facilities (sanitary napkin vending machines) and shall also develop green belt around the nearby schools. Further, PP shall organize quarterly awareness programs for school students to educate them on the significance and preservation of trees.
17.	Wildlife conservation plan as approved by the competent authority shall be implemented. Additional, budget shall be added in the plan, in case additional measures suggested by state wildlife department. The final Wildlife conservation plan duly approved by the CWLW shall be submitted to RO, MoEF&CC within a time frame of three months from the date of grant of EC and the budget approved by the concerned authority shall be deposited in a government account.
18.	Project proponent shall install LED display of air quality (Continuous AAQ monitoring) and stack emission (Continuous emission monitoring) at prominent locations preferably outside the plant's main entrance for public viewing and in administrative complex and maintenance of devices shall be done regularly.
19.	Project proponent shall carry out Water Sprinkling on roads inside the plant area/ administrative/ residential areas and outside the plant area at least for 2 KM on a regular basis to control the air pollution. A logbook shall be maintained for the activity and be in six-monthly compliance report.
20.	PP shall deploy vacuum based vehicle for everyday cleaning of the road in and around plant site at least for 5 KM. A 3 tier plantation on both side of roads shall be done with native and fruit bearing species.
21.	Environment Audit of plant shall be done annually and report shall be submitted to Regional office of the Ministry.
22.	A detailed action plan regarding leachate handling shall be prepared and implemented in consultation with SPCB and the same shall be submitted to the Regional Office of the Ministry. Leachate shall be treated and reused. No treated leachate shall be discharged in any circumstances. Characteristics of Leachate and the treated leachate shall be monitored once in quarter and records shall be maintained.
23.	Oil and grease recovered from the treatment plant should be disposed only through authorized recyclers.
24.	Monitoring of surface water quality and Ground Water quality shall also be regularly conducted in and around the project site and records to be maintained. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall also be undertaken and results/findings submitted along with half yearly monitoring report. The monitored data shall be submitted regularly on PARIVESH portal as part of Half Yearly compliance report.
25.	For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
26.	PP shall ensure that all types of plastic waste generated from the plant shall be stored separately in isolated area and disposed of strictly adhering to the Plastic Waste Management Rules 2016 (as amended). In pursuant to the Ministry's OM dated 18/07/2022. PP shall also create awareness among the people working in the project area as well as in its surrounding area on the ban on Single Use Plastic (SUP) in order to ensure compliance of Ministry's Notification published by the Ministry on 12/08/2021. A report along with photograph on the measures taken shall also be included in the six monthly compliance report submitted by PP.
27.	PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is

	other than Green belt development. The action in this regard shall be submitted concerned RO in six monthly report.
[B] Socio-economic	
1.	A vision document comprising prospective plan for implementation of various CER activities, plantation programme outside the project cover area, rejuvenation and conservation of water bodies within 5 km radius of the project cover area shall be prepared and submitted to the Regional Office of the Ministry within 6 months. Implementation status of the same shall be reported to the Regional office in 6 monthly compliance report.
2.	Epidemiological Study among population within 5 km radius of project cover area shall be carried out on regular interval (Once in two year) through independent agency. Necessary measures shall be taken as per findings of study in consultation with district administration. Action taken report shall be submitted to the Regional Office of the Ministry.
3.	The budget proposed for PH is Rs. 46.50 Crores. The budget proposed shall be kept in a separate account and audited annually. Project proponent shall implement the action plan to address the issues raised during public hearing within a time frame of 5 years from the date of grant of EC. In addition to this, PP shall strengthen the existing Primary Health Center (PHC) & Community Health Center (CHC) in the study area for better public health as committed. Compliance status in this regard shall be submitted along with the six monthly compliance to the concerned Regional Office of MoEF&CC.
4.	The establishment of a robust public grievance redressal mechanism to address concerns and complaints from local communities regarding the power plant's operations, environmental impacts, or social issues shall be developed. A Senior Officer shall review the functioning of the mechanism twice in a month.
[C] Miscellaneous	
1.	An Environmental Cell headed by the Environment Manager with postgraduate qualification in environmental science/environmental engineering, shall be created. It shall be ensured that the Head of the Cell shall directly report to the Head of the Plant who would be accountable for implementation of environmental regulations and social impact improvement/mitigation measures.
2.	Consent for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
3.	All necessary clearance from the concerned Authority, as may be applicable should be obtained prior to commencement of project or activity.

3.4.6.2. Standard

1(d)	**Thermal Power Plants**
Statutory compliance	
1.	Emission Standards for Thermal Power Plants as per Ministry’s Notification S.O. 3305(E) dated 7.12.2015, G.S.R.593(E) dated 28.6.2018 and as amended from time to time shall be complied.
2.	Part C of Schedule II of Municipal Solid Wastes Rules, 2016 dated 08.04.2016 as amended from time to time shall be complied for power plants based on Municipal Solid Waste.
3.	MoEF&CC Notifications on Water Consumption vide Notification No. S.O. 3305 (E) dated 07.12.2015 read with G.S.R 593 (E) dated 28.6.2018 as amended from time to time shall be complied.
4.	The recommendation from Standing Committee of NBWL under the Wildlife (Protection) Act, 1972 should be

	obtained, if applicable.
5.	No Objection Certificate from Ministry of Civil Aviation be obtained for installation of requisite chimney height and its siting criteria for height clearance.
Ash content/mode of transporatation of coal	
1.	MoEF&CC Notification issued vide S.O. 1561 (E) dated 21.05.2020 and as amended from time to time shall be complied which inter-alia include use of coal by Thermal Power Plants, without stipulations as regards ash content or distance, shall be permitted subject to compliance of conditions prescribed under (1) Setting Up Technology Solution for emission norms, (2) Management of Ash Ponds and (3) Transportation.
Air quality monitoring and Management	
1.	Project proponent shall abide by the provisions of the notification number G.S.R 465(E) dated 11/07/2025 related to FGD.
2.	Low NOX Burners with Over Fire Air (OFA) system shall be installed to achieve NOX emission standard of 100 mg/Nm3.
3.	High efficiency Electrostatic Precipitators (ESPs) shall be installed in each unit to ensure that particulate matter (PM) emission to meet the stipulated standards of 30 mg/Nm3.
4.	Stack with a height of 275 meters shall be provided with continuous online monitoring instruments for SO2, Nox and Particulate Matter as per extant rules.
5.	Exit velocity of flue gases shall not be less than 20-25 m/s. Mercury emissions from stack shall also be monitored periodically.
6.	Continuous Ambient Air Quality monitoring system shall be set up to monitor common/criteria pollutants from the flue gases such as PM10, PM2.5, SO2, NOX within the plant area at four locations. The monitoring of other locations (at least three locations outside the plant area covering upwind and downwind directions at an angle of 120° each) shall be carried out manually.
7.	Adequate dust extraction/suppression system shall be installed in coal handling, ash handling areas and material transfer points to control fugitive emissions.
8.	Appropriate Air Pollution Control measures (Des/DSs) be provided at all the dust generating sources including sufficient water sprinkling arrangements at various locations viz., roads, excavation sites, crusher plants, transfer points, loading and unloading areas, etc.
Noise pollution and its control measures	
1.	The Ambient Noise levels shall meet the standards prescribed as per the Noise Pollution (Regulation and Control) Rules, 2000.
2.	Persons exposed to high noise generating equipment shall use Personal Protective Equipment (PPE) like earplugs/ear muffs, etc.
3.	Periodical medical examination on hearing loss shall be carried out for all the workers and maintain audiometric record and for treatment of any hearing loss including rotating to non-noisy/less noisy areas.
Human Health Environment	
1.	Bi-annual Health check-up of all the workers is to be conducted. The study shall take into account of chronic exposure to noise which may lead to adverse effects like increase in heart rate and blood pressure, hypertension

	and peripheral vasoconstriction and thus increased peripheral vascular resistance. Similarly, the study shall also assess the health impacts due to air polluting agents.
2.	Impact of operation of power plant on agricultural crops, large water bodies (as applicable) once in two years by engaging an institute of repute. The study shall also include impact due to heavy metals associated with emission from power plant.
Water quality monitoring and Management	
1.	Induced/Natural draft closed cycle wet cooling system including cooling towers shall be set up with minimum Cycles of Concentration (COC) of 5.0 or above for power plants using fresh water to achieve specific water consumption of 3.0 m3/MWhr.
2.	In case of the water withdrawal from river, a minimum flow 15% of the average flow of 120 consecutive leanest days should be maintained for environmental flow whichever is higher, to be released during the lean season after water withdrawal for proposed power plant.
3.	Records pertaining to measurements of daily water withdrawal and river flows (obtained from Irrigation Department/Water Resources Department) immediately upstream and downstream of withdrawal site shall be maintained.
4.	Regular (at least once in six months) monitoring of groundwater quality in and around the ash pond area including presence of heavy metals (Hg, Cr, As, Pb, etc.) shall be carried out as per CPCB guidelines. Surface water quality monitoring shall be undertaken for major surface water bodies as per the EMP. The data so obtained should be compared with the baseline data so as to ensure that the groundwater and surface water quality is not adversely impacted due to the project & its activities.
5.	The treated effluents emanating from the different processes such as DM plant, boiler blow down, ash pond/dyke, sewage, etc. conforming to the prescribed standards shall be re-circulated and reused. Sludge/ rejects will be disposed in accordance with the Hazardous Waste Management Rules.
6.	Hot water dispensed from the condenser should be adequately cooled to ensure the temperature of the released surface water is not more than 5 degrees Celsius above the temperature of the intake water.
7.	Wastewater generation of 1080 KLD from various sources (viz. cooling tower blowdown, boiler blow down, wastewater from ash handling, etc) shall be treated to meet the standards of pH: 6.5-8.5; Total Suspended Solids: 100 mg/l; Oil & Grease: 20 mg/l; Copper: 1 mg/l; Iron:1 mg/l; Free Chlorine: 0.5; Zinc: 1.0 mg/l; Total Chromium: 0.2 mg/l; Phosphate: 5.0 mg/l.
8.	Sewage generation of 8 KLD will be treated by setting up Sewage Treatment plant to maintain the treated sewage characteristics of pH: 6.5-9.0; Bio-Chemical Oxygen Demand (BOD): 30 mg/l; Total Suspended Solids: 100 mg/l; Fecal Coliforms (Most Probable Number).
9.	Action plan by the TPPs located within 50 km of a municipality or any Urban Local Body (ULB) to use the treated sewage water produced by the municipality/Urban Local Body(ULB) to reduce fresh water consumption.
Risk Mitigation and Disaster Management	
1.	Adequate safety measures and environmental safeguards shall be provided in the plant area to control spontaneous fires in coal yard, especially during dry and humid season.
2.	Storage facilities for auxiliary liquid fuel such as LDO and HFO/LSHS shall be made as per the extant rules in the plant area in accordance with the directives of Petroleum & Explosives Safety Organisation (PESO). Sulphur Content in the liquid fuel should not exceed 0.5%.
3.	Ergonomic working conditions with First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.

4.	Safety management plan based on Risk Assessment shall be prepared to limit the risk exposure to the workers within the plant boundary.
5.	Regular mock drills for on-site emergency management plan and Integrated Emergency Response System shall be developed for all kind of possible disaster situations.
Green belt and Biodiversity conservation	
1.	Green belt shall be developed in an area of 33% of the total plant area with indigenous native tree species in accordance with CPCB guidelines.
2.	In-situ/ex-situ Conservation Plan for the conservation of flora and fauna should be prepared and implemented.
Waste management	
1.	Solid waste management should be planned in accordance with extant Solid Waste Management Rules, 2016.
2.	Toxicity Characteristic Leachate Procedure (TCLP) test shall be conducted for any substance, potential of leaching heavy metals into the surrounding areas as well as into the groundwater.
3.	Ash pond shall be lined with impervious liner as per the soil conditions. Adequate dam/dyke safety measures shall also be implemented to protect the ash dyke from getting breached. Planting shall be done all along the bank of ash pond.
4.	Fly ash shall be collected in dry form and ash generated shall be used in phased manner as per provisions of the Notification on Ash Utilization issued by the Ministry S.O. 5481 dated 31.12.2021, S.O.6169 (E) dated 30.12.2021, S.O.05 (E) dated 01.01.2024 and amendment thereto.
5.	Unutilized ash if any shall be disposed off in the ash pond in the form of High Concentration Slurry method.
Monitoring of compliance	
1.	Environmental Audit of the project be taken up by the third party for preparation of Environmental Statement as per Form-V & Conditions stipulated in the EC and report be submitted to the Ministry.
2.	Resettlement & Rehabilitation Plan as per the extant rules of Govt. of India and respective State Govt. shall be followed, if applicable.
3.	Energy Conservation Plan to be implemented as envisaged in the EIA / EMP report. Renewable Energy Purchase Obligation as set by MoP/State Government shall be met either by establishing renewable energy power plant (such as solar, wind, etc.) or by purchasing Renewable Energy Certificates.
4.	Energy and Water Audit shall be conducted at least once in two years and recommendations arising out of the Report should be followed. A report in this regard shall be submitted to Ministry's Regional Office.
5.	The project proponent shall (Post-EC Monitoring): a. send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government; b. upload the clearance letter on the web site of the company as a part of information to the general public. c. inform the public through advertisement within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forest and Climate Change (MoEF&CC) at http://parviesh.nic.in. d. upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same periodically; e. monitor the criteria pollutants level namely; PM (PM10& PM2.5incase of ambient AAQ), SO2, NOx (ambient

	levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company; f. submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB; g. submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company; h. inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project and the date of commencement of the land development work.
Corporate Environmental Responsibility (CER) activities	
1.	CER activities will be carried out as per Ministry's OM F.No.22- 65/2017- IA.III dated 30th September, 2020 and 22-65/2017- IA.III dated 25.02.2021 or as proposed by the PP in reference to Public Hearing or as earmarked in the EIA/EMP report along with the detailed scheduled of implementation with appropriate budgeting.

3.5. Agenda Item No 5:

3.5.1. Details of the proposal

Sri Damodaram Sanjeevaiah Thermal Power Station (SDSTPS) Stage-I (2x800 MW) & Stage-II (1x800 MW) un der operation - EC Amendment for Ash pond by **ANDHRA PRADESH POWER DEVELOPMENT COMPANY LIMITED** located at **SPSR NELLORE,ANDHRA PRADESH**

Proposal For		Amendment in EC	
Proposal No	**File No**	**Submission Date**	**Activity (Schedule Item)**
IA/AP/THE/542044/2025	J-13011/20/2007-IA.II(T)	21/07/2025	Thermal Power Plants (1(d))

3.5.2. Project Salient Features

Agenda No 28.5

28.5 3x800 MW Sri Damodaram Sanjeevaiah Thermal Power Project **by M/s Andhra Pradesh Power Development Company Limited** located at Nelaturu Village, Muthukuru Mandal, SPSR Nellore District, Andhra Pradesh **– Amendment in Environment Clearance – regarding. [Proposal No. IA/AP/THE/542044/2025; F.No. J-13011/20/2007-IA.II(T)]**

3.5.3. Deliberations by the committee in previous meetings

N/A

3.5.4. Deliberations by the EAC in current meetings

28.5.2: The EAC observed the following:
i. Project related documents have not been circulated to all the members of EAC by the project proponent.
ii. The Committee noted that as per the ECs accorded, the proponent was supposed to operate the TPP based on imported coal whereas the proponent is operating the TPP based on the domestic coal.
iii. It was apprised by the Member Secretary that as per the MoEF&CC O.M. dated 11/11/2020, 06/12/2023 and 07/01/2025 pertaining to change of coal source for Thermal Power Plants, the exemption from requirement of amendment in Environmental Clearance for change in coal source for TPPs is applicable only for the following

categories:
a. from domestic to domestic,
b. from domestic to domestic (blended with imported coal up to 30% content of imported coal)
c. from imported to imported (blended with domestic coal up to 10% content of domestic coal)
d. from imported to domestic (where the GCV of the domestic coal is of the same grade as of imported coal)
All the Thermal Power Plants (including Captive Power Plants) having Prior Environmental Clearance and going in for change in the coal source other than those falling in the aforementioned category of change in coal source shall approach the Ministry for amendment in environmental clearance along with a study on additional impact assessment and revised EMP based on the change in source of coal.
iv. The Hon'ble National Green Tribunal, Southern Zone, vide order in O.A. No. 105 of 2021 & IA No. 16 of 2023 (SZ) has disposed of the matter on 03/12/2024 with various directions. Among others, the Tribunal has directed:
• "….As the applicants have agreed with the Joint Committee's report, which concluded that there is no monetary loss suffered by them with regard to the crop yield, the compensation for damages as claimed by the applicants cannot be granted.
• In order to sustain the principle of natural justice, we direct the APPCB to issue a show cause notice to the 8th and 9th Respondent on the amount arrived at by the Joint Committee and after enquiry pass appropriate orders, arriving at the final environmental compensation (if any) and recover the same from them.
• The Ministry of Environment, Forest & Climate Change (MoEF&CC) to examine under what authority M/s Sri Damodaram Sanjeevaiah Thermal Power Station has switched over to 100% Indian coal, deviating from the condition imposed in the prior Environmental Clearance, in light of the applicable rules and pronouncements of the Hon'ble NGT and Hon'ble Supreme Court….
Considering the above, the EAC asked the Member Secretary to ensure compliance with the above direction of Hon'ble NGT as mentioned in the judgment dated 03.12.2024 and provide the complete status of its compliance.
Recommendations of the Committee
28.5.3: In view of the forgoing and after deliberations, the Committee **recommended to return the proposal** in its present form and asked the proponent to revisit the entire application by explicitly stating the compliance to the directions of Hon'ble NGT as per the judgement dated 03/12/2024. Further, the proponent was advised to ascertain the requirement of EC amendment from MoEF&CC for change in coal source from imported to domestic coal of CIL as per the MoEF&CC O.M. dated 11/11/2020 and its subsequent amendments. Thereafter, fresh EC amendment proposal shall be submitted by the proponent. Besides, the Committee asked the member secretary to obtain the certified compliance report from the Regional Office for the existing ECs including the change of coal source as stated in the judgement dated 03/12/2024 of Hon'ble NGT.

3.5.5. Recommendation of EAC

Returned in present form

3.6. Agenda Item No 6:

3.6.1. Details of the proposal

2X660 MW Ennore SEZ Thermal Power Plant by M/s. TNPGCL (Erstwhile TANGEDCO) at Voyalur village, Ponneri Taluk, Tiruvallur District, Tamil Nadu – Extension of EC validity by **TANGEDCO** located at **THIRUVALLUR,TAMIL NADU**

Proposal For		Application for Validity Extension of EC- Form-6	
Proposal No	**File No**	**Submission Date**	**Activity (Schedule Item)**
IA/TN/THE/506571/2024	J-13012/36/2010-IA II (T)	24/12/2024	Thermal Power Plants (1(d))

3.6.2. Project Salient Features

Agenda No 28.6
28.6: Proposed 2x660 MW Ennore SEZ Thermal Power Plant by **M/s. TANGEDCO (Presently M/s.**

Tamil Nadu Power Generation Corporation Limited) at Village Vayalur, Taluk Ponneri, **District Thiruvallur, Tamil Nadu – Extension of validity of EC dated 7/01/2014 & CRZ clearance dated 01/01/2014 – reg.**

[Proposal No. IA/TN/THE/506571/2024] [F.No. J-13012/36/2010-IA.II(T) & F.No. 11-80/2011-IA.III]

28.6.1: M/s. TANGEDCO (Presently, M/s. Tamil Nadu Power Generation Corporation Limited) has made an online application vide proposal no. IA/TN/THE/506571/2024 dated 19/11/2024 along with CAF and Form 6 seeking validity extension of the EC dated 07/01/2014 under the provisions of EIA, Notification 2006 and validity extension of CRZ dated 01/01/2014. The proposed project activity is listed at item no. 1(d) Under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting are given as under:

28.6.2: Details of the EC & CRZ clearance:

MoEF&CC has accorded following clearances and amendment to M/s. TANGEDCO for the 2x660 MW Ennore SEZ Thermal Power Plant

Sr. No.	Details of Letter No.	Facility	Clearance	Date of issuance
1.	11-80/2011-IA. III	Coal conveyer and cooling water system for the Ennore SEZ Thermal power station	CRZ	01/01/2014
2.	J-13012/36/2010-IA. II (T)	2x800 MW Ennore SEZ Super critical imported coal based Thermal power plant	Environment Clearance	07/01/2014
3.		Change in configuration of TPP from 2x800 MW to 2x660MW	EC amendment	14/08/2018
4.		2x660 MW Ennore SEZ Super critical imported coal based Thermal power plant	Extension of validity of EC till 06/01/2021	04/02/2019
5.	J-13012/36/2010-IA.II (T)	EC: 2x660 MW Ennore SEZ Super critical imported coal based Thermal power plant CRZ: Coal conveyer and cooling water system	Extension of validity of EC& CRZ till 31/12/2023	09/04/2021
6.	As per amendment to the EIA Notification, 2006 dated 18/01/2021, the period from the 1st April, 2020 to the 31stMarch, 2021 shall not be considered for the purpose of calculation of the period of validity of Prior Environmental Clearances granted under the provisions of this notification in view of outbreak of Corona Virus (COVID-19). As per amendment to the CRZ Notification, 2011 dated 03/07/2023, the period from the 1st April, 2020 to the 31stMarch, 2021 shall not be considered for the purpose of calculation of the period of validity of CRZ clearance granted under this notification in view of outbreak of Corona Virus (COVID-19). In view of the above, the validity of EC&CRZ will be expiring on 31/12/2024.			

28.6.3: Status of implementation of EC dated 07/01/2014 & CRZ clearance dated 01/01/2014 is given as below:

A. EC dated 07/01/2014

Sr. No.	Equipment	Percentage of completed portion (%)	Yet to be completed (in %)	Expected schedule of completion
1	Boiler & Auxiliaries Unit I & II	81	19	31.12.2025
2	Power House & Auxiliaries Unit I & II	63.26	36.74	31.12.2025
3	NDCT I & II	68.99	31.01	31.12.2025
4	Water system (RODM,PT,CWS)	67.17	32.83	31.12.2025
5	SWIO System	72.19	27.81	31.12.2025
6	Coal handling system	64.22	35.78	31.12.2025
7	Ash handling system	59.05	40.95	31.12.2025
8	400 KV GIS &Swithch yard	85.95	14.05	31.12.2025
9	Chimney	87.09	12.91	31.12.2025
10	Fire detection & Protection system	57.92	42.08	31.12.2025

B. CRZ clearance dated 01/01/2014:

Sr. No.	Description of facilities	Percentage of completed portion (%)	Yet to be completed (in %)	Expected schedule of completion
1	Coal pipe conveyor from Ennore Port	50	50	
2	CW intake pipeline from NCTPP complex	50	50	
3	CW outfall pipeline to NCTPP complex	50	50	

28.6.4: Reasons of the delay in implementation:

- The work was awarded to M/s. BHEL and another tenderer has filed a case before High court of Madras and the work was halted due to stay.
- Further, TANGEDCO approached Hon'ble Supreme court of India and after hearing, the judgement was pronounced in favour of TANGEDCO.
- As there was a delay of 2 years to recommence the work. Subsequently, there was a delay due to COVID 19.
- Hence, 70% of work has completed till date and rest of the work is progressing which shall require extension with validity of 1 year.

28.6.5: Proposal of project proponent: Project proponent has requested the Ministry to extend the validity of EC & CRZ clearance for another one year i.e. up to 31/12/2025 for completing the remaining work.

28.6.6: Details regarding pending court cases:

a. As already the Project Proponent has approached the MoEF&CC in this regard, it is open to get their acknowledgement and try to stick to the original proposal without any deviation.

b. Incidentally, when the application was taken up, it was brought to our knowledge that there were concrete structures to an extent of 5460 m^3, which were abandoned in the CRZ area have to be removed.

c. The Chief Engineer - Tamil Nadu Power Generation Corporation Limited (TNPGCL) has filed an affidavit dated 21.09.2024, wherein it is stated that for the clearance of the above concrete structures, tenders have to be floated as per the Tamil Nadu Transparency in Tender Rules, 2000, which would approximately take 145 days or 5 months minimum.

d. We, while disposing of this miscellaneous application, direct the Project Proponent to stick to the timeline given in the affidavit and remove the concrete structures within the time.

28.6.7: ADS Information in chronology: Proposal was considered in the EAC meeting held on 24/01/2025 and the same was deferred for want of additional information. The proponent uploaded the ADS reply through PARIVESH on 29.05.2025. Point-wise reply of ADS is given as below:

S No	ADS Point	Reply/Response of PP
i.	Credible document indicating the completion of 70% of construction work at the project site.	The project is in advanced stage of progress and has achieved around 70% physical progress. Major works of units such as cooling tower are under construction. Necessary photographs showing the progress of work are submitted herewith. The progress of 70% has been arrived at after proper ground assessment and therefore, is accurate.
ii.	Recommendations of the Coastal Zone Management Authority concerned for extending the validity of the CRZ clearance dated 01/01/2014.	Necessary recommendations of SCZMA for extension of EC&CRZ clearance obtained on 24.5.2025 and is submitted.
iii.	EC & CRZ transfer letter in the name of M/s. Tamil Nadu Power Generation Corporation Limited (TNPGCL).	Necessary recommendations of SCZMA for transfer of EC&CRZ clearance from M/s TANGEDCO to M/s TNPGCL is obtained on 24.5.2025 and is submitted
iv.	Point wise compliance to the observations made by Hon'ble NGT in its Order dated 23/09/2024 in Miscellaneous Application [13 of 2024(SZ)] along with the relevant supporting document.	Points 1, 2 & 3) Necessary proposal has been already submitted to MOEF&CC under 7ii(c) of EIA notification 2006 on 15.5.2024 to adopt approved route in CRZ area as per original CRZ clearance dt 1.1.2014 and EC dt 7.1.2014 and best possible route in non CRZ area which stands acknowledged. Point 4 & 5) The abandoned concrete structures to an extent of 5460 m^3 in the CRZ area are being removed after awarding the contract. Around 1020 m^3 out of 5460 m^3 (around 20%) is removed already and the balance structures will be removed within a month to and thus, the directions of Hon'ble NGT(SZ) will be complied with. Point 6) TNPGCL has awarded the work and the work is being carried out as detailed in point (4) above and assured that abandoned concrete structures will be removed within a month's period.

Further ADS was raised on 31.05.2025. The proponent uploaded the ADS reply through PARIVESH on 05.06.2025. Point-wise reply of further ADS is given as below:

S. No.	ADS RAISED	REPLY
1.	With respect to reply to point no. i of the ADS reply, tabular statement containing time bar chart indicating the status of construction, completion o	The project is progressing with 72% completion and component wise progress is furnished in the Bar chart submitted. Time frame required to complete the project is 31.12.2025.

	f different components envis aged under the EC dated 01/ 01/2014 and 07/01/2014 is to tally missing .The time bar c hart should also indicate the t ime frame required for compl etion of remaining componen ts for which validity extensio n is sought.		
2.	With respect to reply to point no. ii of the ADS reply, TAN GEDCO is requested to sub mit the action plan to comply with the recommendations of TNCZMA.	**Conditions of DCZMA**	**Compliance report**
			Original alignment approved in CRZ area as per CRZ clearance dt 1.1.201 4 is being adopted.
			All the recommendations of Environ mental Management plan are followe d by erecting necessary ESP, Chimn ey, Cooling Tower, ETP, STP and pr ovision of Green belt.
		1. The Mangroves in the Buffer Zon e shall not be affected due to the pr oposed activity.	Mangroves in buffer zone will not be affected due to proposed activity. If warranted, mangrove will be replante d in consultation with forest Departm ent.
			Arrangement is being made to plant Mangroves in the area in consultatio n with forest department.
		Conditions of TNSCZMA	**Compliance report**
			Action is being taken to complete the remaining works in CRZ area within the extended period of 31.12.2025.
			It is assured that original alignment a pproved in CRZ area as per CRZ cle arance dt 1.1.2014 is being adopted f or the pipelines and other foreshore f acilities. If any deviation is necessar y, prior approval of TNSCZMA and MOEF&CC will be obtained.
			All the directions of Hon'ble NGT(S Z) in the final order of MA 13/2024 are being complied and the detailed r eport furnished in the reply to ADS (3).
			It is assured that all conditions of TN SCZMA and DCZMA are followed s crupulously.
3.	With respect to reply to point	**Directions of NGT (SZ)**	**Action taken report**

	no. iii of the ADS reply, tabular statement containing directions passed by the Honble NGT and action taken by the proponent to comply with the same shall be submitted. Further, the directions wherein compliance is under progress, time frame with financial outlay for completion of the same shall be submitted.		TNPGCL decided to adopt approved route in CRZ area and slight deviation in non CRZ area as per 7 (ii) (c) of the EIA Notification, 2006 and informed to MOEF&CC on 15.5.2024 and acknowledged on 20.5.2024. Informed under 7(ii) c of the EIA Notification, 2006 to MOEF&CC vide letter dt 15.5.2024 and acknowledged on 20.5.2024. It is assured that original alignment in CRZ area will be followed scrupulously. The abandoned concrete structures in CRZ area are removed and around 2160 m^3 out of 5460 m^3 has already been removed so far. The balance concrete structures will be removed within a month. Financial outlay for the above work is Rs. 2.22 crores. The tender was awarded in 4/2025 and the work is under progressing with 40%. The balance will be removed within a month. Direction being followed and removal of abandoned concrete has since begun. Entire abandoned concrete structures will be removed and disposed within stipulated time and Hon'ble NGT directions will be complied with. Action is being taken to comply with the directions of Hon'ble NGT(SZ).
4.	In addition to the above ,proponent is required to submit an undertaking that requisite name transfer in EC & CRZ from TANGEDCO to TNPGCL will be obtained from the concerned sectors of MOEF & CC	An undertaking stating that transfer of EC&CRZ clearance from M/s. TANGEDCO to M/s TNPGCL will be obtained from the concerned sector of MOEF&CC has been submitted.	

**As on 30-06-2025 -- The abandoned concrete structures in CRZ area are removed and around 4095 m^3 (75%) out of 5460 m^3 has been removed so far. The balance concrete structures will be removed within 2 weeks.

28.6.8: Proposal was considered in the EAC meeting held on 08/07/2025 and the committee again deferred the proposal for want of additional information. The proponent uploaded the ADS reply through PARIVESH on 25.07.2025. Point-wise reply of further ADS is given as below:

S.No.	Remark	Reply
1	Increase in percentage of the completion of work from 70 to 72 % and corresponding details of the activities carried out after the expiry of the EC & CRZ on 31/12/2024 along with the geotagged photographs of the site.	70% of work was completed as on 18.11.2024 (At the time of submission of application for Extension of validity of EC & CRZ clearance for 1-year ie 31.12.2025) As on 31.12.2024, balance 2% works were completed. No new work orders issued and no works (Project work) are carried out after 31.12. 2024. Geo tagged photos, Undertaking and letter of intimation to stop the work issued to contractor beyond 31.12.2024 are enclosed. However, the essential works which are required to protect /

		safety of structure and plants such as Boiler ,Turbine, p reservation of erected structures in the power plant area are being carried out.
2	Details of the Original application bearing no. 26 of 2025 along with the present status of the case and explanation from proponent for not disclosing the same in the reply to th e additional information	TNPGCL submitted the reply for the ADS raised on 3 1.5.25 through letter dt 5.6.2025 (wherein replies for th e ADS raised alone were submitted). The details of cou rt cases pending at the High court as well as Hon'ble N GT along with present status are submitted. Further, the details regarding of OA No. 26 of 2025 we re disclosed in the brief summary/ Basic Information a nd Affidavit/ Undertaking -2 circulated to the Ministry and EAC members.
3	Point wise response to the representation al ong with the relevant supporting documents	Pointwise response to the representation along with the supporting documents are submitted.

28.6.9: Summary of court cases

S. N o.	Case no./ T itle	Name of t he Court	Brief Summary of the case	Last date of hearing	Next date of hearing	Direction/ Action taken by PP
1	WP 16353/ 2021	High cour t	Petitioner compl ained to remove t he dumped forei gn materials in th e water body	13.3.2024	Final heari ng pending	Interim order to remove t he dumped foreign mater ials and to restore the are a and to obtain the comp liance report from PWD. The same was carried ou t in 2022 and compliance report received from PW D which was filed before the Hon'ble High court o f madras on 13.03.2024 and the copy of PWD let ter is enclosed. Next hea ring is awaited
2	OA 26/ 202 5	NGT(SZ)	Petitioner appeal ed to stop the Pro ject work as the EC expires by 3 1.12.2024	15.07.2025	22.08.2025	As per direction of Hon' ble NGT (SZ), the count er affidavit filed on 16.4. 2025 and additional affid avit is filed on 28- 07-20 25. Next hearing is sche duled on 29.07.2025
3	MA 13/ 20 24 of OA 1 62/ 2021	NGT(SZ)	As TNPGCL has decided to adopt the original route approved in CRZ clearance Dt 01.0 1.2014.Hence M A 13/2024 was fi led to appraise th e Hon'ble NGT(SZ) on above lin es	Final order issued on 2 3.9.2024	Disposed	To remove the abandone d concrete structure of 5 460 M3 in CRZ area. Th e abandoned concrete str uctures were removed an d the area is restored on 21.07.2025. Necessary c ompliance report is bein g filed before Hon'ble N GT(SZ).

28.6.10: Details of SCN issued and violation if any: Nil

28.6.11: Written submissions

Project proponent submitted the following undertaking during the EAC meeting

TANGEDCO (presently TNPGCL) gives undertaking that after the expiry of EC & CRZ clearance on 31.12.2024, TANGEDCO (presently TNPGCL) have not undertaken any fresh works. The contractors have been asked not to commence any new works or major works, since the expiry of EC & CRZ clearance was on 31.12.2024.Some essential and residual components of works which began before 31.12.2024 continued in a skeleton way. TANGEDCO (presently TNPGCL) assured that new works will be taken up after obtaining Extension of EC & CRZ clearance.

3.6.3. Deliberations by the committee in previous meetings

Date of EAC 1 :24/01/2025

Deliberations of EAC 1 :

Observations and deliberation of the EAC

18.2.7: The Committee observed and noted the following:

i. Instant proposal is for extending the validity of EC & CRZ accorded for the 2x660 MW Ennore SEZ Super critical imported coal based Thermal power plant by another one year i.e., 31/12/2025.

ii. It was apprised to the EAC following are the provisions under EIA, 2006 and CRZ, 2011 for validity extension:

iii. Project proponent has not submitted any credible document such as site photographs, work order issued to the contractors and time bar chart indicating the completion of 70% of construction work at the project site.

iv. Committee noted that proponent has not submitted the recommendations of the Coastal Zone Management Authority concerned for extending the validity of the CRZ clearance dated 01/01/2014 as required under the provisions of CRZ Notification, 2011.

v. Committee noted that project proponent has changed the company name from M/s. TANGEDCO to M/s. Tamil Nadu Power Generation Corporation Limited (TNPGCL). Name transfer of EC & CRZ clearance in the new company name has not been obtained by the proponent till date.

vi. Proponent has not submitted the compliance to the observations made by Hon'ble NGT in its Order dated 23/09/2024 in Miscellaneous Application [13 of 2024 (SZ)] as mentioned at para no 18.2.6.

18.2.8: Recommendations of the Committee:

In view of the foregoing and after detailed deliberations, the EAC ***deferred*** the proposal and sought for following additional information for further consideration of the proposal:

Date of EAC 2 :08/07/2025

Deliberations of EAC 2 :

Observations and deliberation of the EAC

27.2.8: The Committee observed and noted the following:

i. The instant proposal is for validity extension of the EC dated 07/01/2014 under the provisions of EIA, Notification 2006 and validity extension of CRZ dated 01/01/2014 for proposed 2x660 MW Ennore SEZ Thermal Power Plant by M/s. Tamil Nadu Power Generation Corporation Limited (TNPGCL) (Erstwhile TANGEDCO) at Village Vayalur, Taluk Ponneri, District Thiruvallur, Tamil Nadu.

ii. EAC was in receipt of the representation against the instant EC&CRZ validity extension proposal. In this regard, EAC asked the member secretary that the representation shall be sent to proponent to submit point wise response with supporting documents for consideration.

iii. As per the MoM of 24 Jan 2025, the percentage of completion of work was 70 %. However, proponent has now reported 72% completion of work. Neither the proponent nor the consultant could explain the increase in percentage of the completion of work along with corresponding details of the activities carried out after the expiry of the EC & CRZ on 31/12/2024.

iv. With respect to the instant validity extension proposal, it was apprised by the member secretary that there is Original application bearing no. 26 of 2025 titled Selvaraj Duraiswamy, Thiruvallur District Vs MoEF&CC has been filed before the Hon'ble NGT(SZ), Chennai. However, no information has been provided in the application and in the presentation made before the EAC by the proponent. It was also apprised that as per affidavit filed by the proponent in the Hon'ble NGT, it has been prayed that "As the process for extension of EC & CRZ Clearance for 1 year is under process, it is requested to permit the continuance of project work since, the project is so essential to meet out the ever growing power demand of State of Tamil Nadu and the Power project is executed with huge investment from public exchequer". Next date of hearing in the matter is 15/07/2025.

v. EAC took the matter very seriously as the proponent and EIA consultant is deliberately concealing the information related to the status of construction undertaken after 31/12/2024 and also the OA No. 26 of 2025 pending before the Hon'ble NGT(SZ).

27.2.9: Recommendations of the Committee:

In view of the foregoing and after detailed deliberations, the EAC **deferred** the proposal and sought for following additional information for further consideration of the proposal:

i. Increase in percentage of the completion of work from 70 to 72 % and corresponding details of the activities carried out after the expiry of the EC & CRZ on 31/12/2024 along with the geo-tagged photographs of the site.

ii. Details of the Original application bearing no. 26 of 2025 along with the present status of the case and explanation from proponent for not disclosing the same in the reply to the additional information.

iii. Point wise response to the representation along with the relevant supporting documents.

3.6.4. Deliberations by the EAC in current meetings

Observations and deliberation of the EAC

28.6.12: The Committee observed and noted the following:

i. The instant proposal is for validity extension of the EC dated 07/01/2014 under the provisions of EIA, Notification 2006 and validity extension of CRZ dated 01/01/2014 for proposed 2x660 MW Ennore SEZ Thermal Power Plant by M/s. Tamil Nadu Power Generation Corporation Limited (TNPGCL) (Erstwhile TANGEDCO) at Village Vayalur, Taluk Ponneri, District Thiruvallur, Tamil Nadu.

ii. EAC noted that as proponent has submitted the recommendations of TNCZMA along with the action plan to comply with the said recommendations.

iii. Proponent has submitted that time barchart stating that all the pending works will be completed within the EC validity period i.e., by 31/12/2025. Further, proponent has submitted an undertaking stating that after the expiry of EC & CRZ clearance on 31.12.2024, TANGEDCO (presently TNPGCL) have not undertaken any fresh works. The contractors have been asked not to commence any new works or major works, since the expiry of EC & CRZ clearance was on 31.12.2024.

iv. There are two court cases pending with respect to the instant project. One case bearing number WP 16353/ 2021 is pending before the Hon'ble High Court of Chennai and one case bearing number OA 26/ 2025 is pending before the NGT(SZ).

Recommendations of the Committee:

28.6.13: In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal for extension in validity of EC dated 07/01/2014 & CRZ clearance dated 01/01/2014 till 31/12/2025 under the provisions of EIA Notification, 2006 & CRZ Notification, 2011 **subject to uploading of written submission on PARIVESH Portal** and stipulation of the following additional specific conditions.

i. Project proponent shall abide by all orders and judicial pronouncements, made from time to time by the Hon'ble High Court of Madras in Writ Petition No. WP 16353/ 2021 and Hon'ble National Green Tribunal in Original Application

No. 26 of 2025.
ii. Project proponent shall apply for transfer of EC and transfer of CRZ clearance in the name of M/s. Tamil Nadu Power Generation Corporation Limited within one month from the date of issue of the EC&CRZ clearance validity extension letter.
iii. All the recommendations of Tamil Nadu Coastal Zone Management Authority shall be strictly adhered with. Compliance status in this regard shall be submitted to the concerned Regional Office of the Ministry along with the six monthly compliance report.
All other terms and conditions stated in the EC dated 07/01/2014 and CRZ clearance dated 01/01/2014 shall remain unchanged.

3.6.5. Recommendation of EAC

Recommended (Subject to submission of requisite information/ documents)

3.6.6. Details of Environment Conditions

3.6.6.1. Specific

Additional specific conditions	
1.	Project proponent shall abide by all orders and judicial pronouncements, made from time to time by the Hon'ble High Court of Madras in Writ Petition No. WP 16353/ 2021 and Hon'ble National Green Tribunal in Original Application No. 26 of 2025
2.	Project proponent shall apply for transfer of EC and transfer of CRZ clearance in the name of M/s. Tamil Nadu Power Generation Corporation Limited within one month from the date of issue of the EC&CRZ clearance validity extension letter.
3.	All the recommendations of Tamil Nadu Coastal Zone Management Authority shall be strictly adhered with. Compliance status in this regard shall be submitted to the concerned Regional Office of the Ministry along with the six monthly compliance report.
4.	All other terms and conditions stated in the EC dated 07/01/2014 and CRZ clearance dated 01/01/2014 shall remain unchanged.

Day 2 -13/08/2025

3.1. Agenda Item No 1:

3.1.1. Details of the proposal

Telangana Super Thermal Power Project, Phase-II (3x800MW) by **NTPC LIMITED** located at **PEDDAPALLI,TELANGANA**			
Proposal For		Fresh EC	
Proposal No	**File No**	**Submission Date**	**Activity (Schedule Item)**
IA/TG/THE/544226/2025	J-13012/112/2010-IA.II(T)	22/07/2025	Thermal Power Plants (1(d))

3.1.2. Project Salient Features

Agenda No. 28.7

28.7 Expansion of Telangana Super Thermal Power Project by adding 3x800MW (Phase II) in existing 2x800MW (Phase I) by **M/s NTPC Limited** located at village Ramagundam, **District Peddapalli, Telangana - Environmental Clearance - regarding.**

[Proposal no. IA/TG/THE/544226/2025, F. No. J-13012/112/2010-IA. II(T)]

28.7.1: M/s. NTPC Limited has made an online application vide proposal no. IA/MP/THE/544226/2025 Dated 10.07.2025 along with copy of EIA/EMP report, Form-I (CAF, Part A, B & C) and Certified compliance report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at item no. 1(d) – Thermal Power Plants under Category 'A' of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Name of the EIA consultant: M/s Mantec Consultants Pvt. Ltd. [S. No. 138 List of ACOs with their Certificate No.: NABET/EIA/2326/RA 0305_Rev. 01 (Valid up to 20.04.2026).

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

28.7.2: The project of Telangana Super Thermal Power Project, Phase-II (3x800MW) located at village Ramagundam, Kundanpalli, Ranapur etc. District Peddapalli, of Telangana State is for enhancement of power generation capacity from 1600 MW to 4000 MW with addition of 3 Units of 800 MW each based on Ultra Super Critical Technology & Air-Cooled Condenser.

28.7.3: The existing project was accorded environmental clearance vide lr. No. J-13012/112/2010-IA. II(T) dated 20/01/2016 from MoEF&CC. The Environmental Clearance was amended vide letter dated 06.03.2017, 21.10.2020, & 08.08.2022. Consent to Operate for the existing Phase-I (2x800MW) Units was accorded by Telangana State Pollution Control Board (TSPCB), Hyderabad vide Consent Order No. 20234665654 dated 16.08.2023. The validity of CTO is up to 31.12.2028.

28.7.4: Implementation status of the existing EC dated 20/01/2016

S. N.	Configuration	Capacity (MW)	As per EC date d	Implementation Status as on date	Production as p er CTO
1	2x800 MW	1600	20/01/2016	Both the units have been commissioned and are un der Commercial Operatio n.	1600 MW

28.7.5: Certified compliance report from Regional Office

The Status of compliance of earlier EC was obtained from MoEF&CC Sub-Office, Hyderabad vide letter no. 1-53/2024/SO-HYD dated 31.12.2024 in the name of NTPC Limited Telangana. The Action taken report regarding the partially/non-complied conditions was submitted to Sub-Office, MoEF&CC-Hyderabad, Telangana vide letter no. 09/EMG/Telangana Phase-II/2025/231 dated 06.02.2025. MoEF&CC (RO), Sub-Office, Hyderabad evaluated the same and subsequent submissions and has issued verified compliance status and issued report on 27.06.2025. The details of the observations made by RO in the report dated 27.06.2025 along with its re-assessment / present status as furnished by the PP is given as below:

S. No.	Non-compliances D etails (EC Condition)	Observatio n of RO (a bridged)	Condition no.			Re-assessment by RO / C ompliance Status (Remarks of MoEF&CC, RO Hyderabad based on the ATR submitted by P P)
			EC date	Specif ic	Gener al	
1	Long-term monitori ng of temperature sh all be undertaken on site and off-site of th e TPP, as data of de crease in temperatur e needs to be Verifie d. Further, requisite corrective action sha ll be taken based on the findings of the m onitoring.	PP has not monitored l ong-term te mperature c hanges.	20.01.2016	(x)		Complied. PP engaged EPTRI to carry out a detailed study on "Lon g-term monitoring of temper ature on-site and off-site of t he TPP" and the study repor t has been submitted. In the report it is mentioned that the annual trend analysi s of ambient temperature dat a from the India Meteorolog ical Department (IMD) for the p

S. No.	Non-compliances Details (EC Condition)	Observation of RO (abridged)	Condition no.			Re-assessment by RO / Compliance Status (Remarks of MoEF&CC, RO Hyderabad based on the ATR submitted by PP)
			EC date	Specific	General	
						eriod 1999–2024 (offsite) and from the NTPC Ramagundam Weather Monitoring Station for the period 2010–2024 (onsite) indicates a decreasing trend in maximum ambient temperature over the years. The ambient air temperature study for the Ramagundam area indicates a gradual decrease in both offsite and on-site temperature data over the study period.
2	The total Radioactivity in the working areas such as coal stock yard, fly ash pond shall be calculated based on the analysis results per unit weight of coal/ash. The total radioactivity in the atmosphere is to be compared with the maximum permissible dosage levels of each person working in those areas. This is to be conducted one in a year.	PP has not calculated total radioactivity based on the analysis results.	21.10.2020		ii	Complied. The undersigned verified with PP, who shared the final report of "Radioactivity Assessment Study in Coal and Ash storage areas at Telangana STPP" by email on 07.05.2025. The study was conducted by M/s. Isotope Application Services Board of Radiation and Isotope Technology Navi Mumbai. In the report, the Radiation monitoring at the coal and fly ash storage yards showed no significant deviation from background levels. As per AERB Directive No. 01/2011, the public exposure limit is 1 mSv/year. The maximum recorded dose rate of 28 μR/hr (at Ash Dyke-1 Lagoon-3 including the AWRS system), though observed only in isolated spots, was conservatively used for dose estimation. This corresponds to an annual dose of approximately 0.58 mSv/year for a standard work schedule, which is well below the public exposure limit. Additionally, activity concentrations of radioactive elements in coal and ash samples were much lower than exemption limits set by IAEA SSR-6 Rev.1/2018.

In addition to the above, Status of installation of Flue Gas Desulphurization is furnished as per the MoEF&CC

Notification dated 11/07/2025:

i. Ccategorization details of TPP as per CPCB

- C: Other than those included in Category A and B

ii. Sulfur content of the coal to be fired in the boiler – 0.4- 0.6 %:

iii. Status of FGD installation for existing unit:

- ***FGD erection, Commissioning status***: FGD Commissioned for Telangana Phase-I (Unit-I&II) and COD declared on 15.09.2024 & 30.09.2024 respectively.
- ***FGD operational status***: Operational
- ***Emission Norms compliance status***: Yes
- ***Gypsum Disposal***: Gypsum is being sold to cement industries through e-auction by NTPC Vidyut Vyapar Nigam Limited (NVVN).

iv. ***Action plan for installation of new stack in compliance to the notification number GSR 742 (E) dated the 30/08/1990 for the proposed expansion***: Installation of 275m high stacks envisaged for the proposed expansion project in compliance to the notification GSR 742(E) dated 30.08.1990 as per Notification dated 11/07/2025.

28.7.6: The detail of the ToR is furnished as below:

Proposal No. with Date	Consideration	Details	Date of accord	ToR Validity
IA/TG/THE/458070/2024 dated 14/02/2024	6th EAC(Thermal) Meeting held on 27.02.2024.	Terms of Reference		09.04.2028

28.7.7: Environmental site settings

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>1.</td><td>Total land</td><td>738.5503 Ha</td><td>Land Use: Existing under possession land (491.6923 Ha) is Industrial Land, Proposed to be acquired land (246.8580 Ha) is Agricultural land.</td></tr>
<tr><td>2.</td><td>Land use break up</td><td>
<table>
<tr><th colspan="5">Telangana STPP Land Break-up (in Ha.)</th></tr>
<tr><th colspan="2">Description</th><th>Area for Phase-I (in Ha.)</th><th>Area for Phase-II (in Ha.)</th><th>Total Area (Phase-I & II) (in Ha.)</th></tr>
<tr><td>A</td><td>Main plant and associated facilities</td><td>94.9</td><td>127.88</td><td>222.78</td></tr>
<tr><td>B</td><td>Ash Dyke Area</td><td>80.937</td><td>120</td><td>200.937</td></tr>
<tr><td>C</td><td>Total area considered for Greenbelt calculation (A+B)</td><td>175.837</td><td>247.88</td><td>423.717</td></tr>
<tr><td>D</td><td>Greenbelt Area</td><td>81.138</td><td>110.83</td><td>191.968</td></tr>
<tr><td>E</td><td>Other Misc. Area</td><td>-</td><td>122.8653</td><td>122.8653</td></tr>
</table>
</td><td>Out of total project area of 738.5503 Ha., an area of 246.8580 Ha. is proposed to be acquired for which Preliminary notification dated 05-09-2024 and demand letter dated 10.09.2025 has been issued by Revenue Dept.</td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>F</td><td>Total Area (C+D+E)</td><td>256.975</td><td>481.5753</td><td>738.5503</td></tr>
</table>
</td><td></td></tr>
<tr><td>3.</td><td>Land acquisition details as per MoEF&CC O. M. dated 07/10/ 2014 & 19/02/2 025.</td><td>
Out of total area of 738.5503 Ha., 491.6923 Ha area is under possession and 246.8580 Ha. proposed to be acquired for which preliminary notification is already issued by State Govt.
Main Plant and Associated Facilities for the proposed expansion project is envisaged to be located within the existing plant premises on available area. Approx. 246.858 hectares of land is identified nearby as h pond area of Ramagundam STPS on the Western side from which new Ash Pond is proposed to be developed on 120 Ha.
<table>
<tr><th colspan="2">Land Details</th><th>Phase-I, Ha.</th><th>Phase-II, Ha.</th><th>Total, Ha.</th></tr>
<tr><td rowspan="4">Available Land, Ha.</td><td>Govt.</td><td>97.9150</td><td>149.5280</td><td>247.4430</td></tr>
<tr><td>Pvt.</td><td>159.0600</td><td>85.1893</td><td>244.2493</td></tr>
<tr><td>Forest</td><td>NIL</td><td>NIL</td><td>NIL</td></tr>
<tr><td>Total</td><td>256.9750</td><td>234.7173</td><td>491.6923</td></tr>
<tr><td rowspan="4">To be acquired Land, Ha.</td><td>Govt.</td><td>NIL</td><td>NIL</td><td>NIL</td></tr>
<tr><td>Pvt.</td><td>NIL</td><td>246.8580</td><td>246.8580</td></tr>
<tr><td>Forest</td><td>NIL</td><td>NIL</td><td>NIL</td></tr>
<tr><td>Total</td><td>NIL</td><td>246.8580</td><td>246.8580</td></tr>
<tr><td colspan="2">Total, ha.</td><td>256.9750</td><td>481.5753</td><td>738.5503</td></tr>
</table>
</td><td>Land Details for existing available land and proposed acquisition are available and submitted with EC Application.</td></tr>
<tr><td>4.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>
Project site: The land proposed to be acquired is purely agricultural land and no human habitation is involved. The land acquisition process has been initiated by the State Government, but the State Revenue has not proposed any R&R Plan at this stage.
Study Area:
Details of nearby villages are as per the following:
<table>
<tr><th>Habitation/Village Name</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td>Ramagundam Village</td><td>4.5 km</td><td>NWW</td></tr>
<tr><td>Godavarikhani Town</td><td>3.5 km</td><td>W</td></tr>
<tr><td>NTPC Township</td><td>2.0 km</td><td>W</td></tr>
<tr><td>Annapurna Colony</td><td>1.0 km</td><td>N</td></tr>
<tr><td>Matangi Colony</td><td>1.3 km</td><td>SE</td></tr>
<tr><td>Elkalpally Village</td><td>5.7 km</td><td>SSE</td></tr>
<tr><td>Ranapur Village</td><td>6.4 km</td><td>SSW</td></tr>
<tr><td>Malyalpalli Village</td><td>2.7 km</td><td>W</td></tr>
</table>
<table>
<tr><th>School</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td>Zilla Parishad High School</td><td>0.9 km</td><td>NE</td></tr>
<tr><td>St. Claire High School</td><td>2.0 km</td><td>ENE</td></tr>
<tr><td>Kendriya Vidyalaya</td><td>2.3 km</td><td>NE</td></tr>
<tr><td>Sachdeva School</td><td>1.0 km</td><td>NE</td></tr>
<tr><td>Sri Chaitanya</td><td>1.6 km</td><td>NE</td></tr>
<tr><td>Rao’s Techno School</td><td>1.2 km</td><td>NNE</td></tr>
<tr><td>St Mathews High School</td><td>1.4 km</td><td>N</td></tr>
<tr><td>Vishwa Shanthi High School</td><td>1.3 km</td><td>NNE</td></tr>
</table>
<table>
<tr><th>Hospital</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td>ESI Clinic/ Dispensary</td><td>1.1</td><td>NNE</td></tr>
<tr><td>Dhanvantari Hospital</td><td>1.9</td><td>E</td></tr>
<tr><td>SIMS medical college</td><td>3.5 km</td><td>NE</td></tr>
</table>
</td><td>-</td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
Protection measures to be adopted are as follows:
Control of Air Emissions: Provision of High Efficiency ESP, Low NOx Burner & Over Fire Air System, Dust Extraction Dust Suppression, Dry Fog Dust Suppression, Fog Cannons, Water Sprinkling on Hauling Roads ·
Noise: Acoustic Enclosures & barriers
Greenbelt Buffer: Development of dense greenbelt in the periphery of plant as well as towards the side of villages/ habitations, Afforestation/ Miyawaki Plantation on available land.
Wastewater: ETP, STP, AWRS, Zero Liquid Discharge · Rainwater Harvesting, Watershed Development in the vicinity.
Safety: Display signages, speed breakers, and crossing guards provision; optimization of heavy vehicle movement near villages, Disaster Management Plan & Provisions.
Health & Awareness: Regular health camps, distribution of masks, and environmental awareness programs for surrounding community.
A 250–500 m buffer from the Reserve Forests will be maintained.
No project activity to encroach upon forest land.
Wildlife crossings and signage will be provided based on biodiversity assessment.
Native species greenbelt development along the forest boundary.
Downcast, low-intensity lighting will be used near forest areas.
Night-time construction near sensitive zones will be minimized.
Awareness programs on forest and wildlife protection
Implementation of Wildlife Conservation Plan in consultation with Forest Dept.
CSR & Monitoring: Support for infrastructure and development, air and noise monitoring in the nearby
</td><td></td></tr>
<tr><td>5.</td><td>Latitude and Longitude of all corners of the project site.</td><td>
A. Main Plant
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>18°45'05" N</td><td>79°28'30" E</td></tr>
<tr><td>B</td><td>18°44'55" N</td><td>79°28'26" E</td></tr>
<tr><td>C</td><td>18°45'01" N</td><td>79°28'07" E</td></tr>
<tr><td>D</td><td>18°45'06" N</td><td>79°28'05" E</td></tr>
<tr><td>E</td><td>18°45'12" N</td><td>79°28'08" E</td></tr>
</table>
B. Ash Pond: Existing
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>18°43'22" N</td><td>79°29'11" E</td></tr>
<tr><td>B</td><td>18°43'08" N</td><td>79°29'10" E</td></tr>
<tr><td>C</td><td>18°42'36" N</td><td>79°28'25" E</td></tr>
<tr><td>D</td><td>18°43'05" N</td><td>79°28'24" E</td></tr>
</table>
C. Ash Pond: Proposed
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>18°45'24" N</td><td>79°22'46" E</td></tr>
<tr><td>B</td><td>18°46'6" N</td><td>79°23'31" E</td></tr>
<tr><td>C</td><td>18°45'48" N</td><td>79°23'37" E</td></tr>
<tr><td>D</td><td>18°45'30" N</td><td>79°23'37" E</td></tr>
<tr><td>E</td><td>18°45'16" N</td><td>79°24'9" E</td></tr>
<tr><td>F</td><td>18°45'6" N</td><td>79°24'25" E</td></tr>
<tr><td>G</td><td>18°44'54" N</td><td>79°24'25" E</td></tr>
</table>
</td><td></td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>H</td><td>18°44'47" N</td><td>79°24'28" E</td></tr>
<tr><td>I</td><td>18°44'56" N</td><td>79°24'10" E</td></tr>
<tr><td>J</td><td>18°45'9" N</td><td>79°23'31" E</td></tr>
</table>
</td><td></td></tr>
<tr><td>6.</td><td>Elevation of the project site</td><td>The general surface elevation of the main plant area is 140-170 m and ash dyke is 200-210m.</td><td>---</td></tr>
<tr><td>7.</td><td>Involvement of Forest land if any</td><td>Status of stage I Forest Clearance: Not Applicable
Area of the forest land involved: NIL
There is no Forest Land involved in the existing Phase-I and proposed Phase-II expansion Project.</td><td>---</td></tr>
<tr><td>8.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td>Project site: NTPC Water Reservoir (Balancing Reservoir)
Study area: 10 km radius from the project area.
<table>
<tr><th>S.N.</th><th>Name</th><th>Distance in Km</th><th>Direction</th></tr>
<tr><td colspan="4">Water Bodies</td></tr>
<tr><td>1</td><td>Godavari River</td><td>4.24</td><td>NE</td></tr>
<tr><td>2</td><td>NTPC Reservoir (Jyotisagar)</td><td>1.8</td><td>S</td></tr>
</table>
Plant site (at an elevation of 140-170 m) is higher than the HFL of Godavari River (139m MSL)</td><td>As per the Irrigation and CAD Dept. letter dtd 06/02/2025, the observed maximum HFL of River Godavari is 139 m at Mancherial gauge station on 14.07.2022. The approx. distance of project site from HFL is 4km.</td></tr>
<tr><td>9.</td><td>Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area.</td><td>No Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. within the study area of 10 km.
List of Reserved and Protected Forests in study area:
<table>
<tr><th>S.N.</th><th>Name</th><th>Distance in Km</th><th>Direction</th></tr>
<tr><td>1</td><td>Ramagundam R.F.</td><td>0.7</td><td>NNW</td></tr>
<tr><td>2</td><td>Putnur R.F.</td><td>3.4</td><td>WSW</td></tr>
<tr><td>3</td><td>Raidandi R.F.</td><td>4.0</td><td>WNW</td></tr>
<tr><td>4</td><td>Indaram R.F.</td><td>4.0</td><td>WSW</td></tr>
<tr><td>5</td><td>Ramgir R.F.</td><td>8.99</td><td>S</td></tr>
<tr><td>6</td><td>Khanam Palli R.F.</td><td>7.1</td><td>W</td></tr>
</table></td><td>Certificate ref. no. 821/S4/ 2024(i) dated 29.03.2025 has been issued by Forest Dept.- Govt. of Telangana regarding distance from nearest protected area.</td></tr>
<tr><td>10.</td><td>Archaeological sites monuments / historical temples etc.</td><td>No Archaeological sites within 10 km of study area.</td><td>--</td></tr>
<tr><td>11.</td><td>Facility envisaged in CRZ area (Only for coastal power plant)</td><td>Not Applicable</td><td>--</td></tr>
<tr><td>12.</td><td>Involvement of Critically Polluted Area/ Severe</td><td>No Involvement of Critically Polluted Area/ Severely Polluted area.</td><td>--</td></tr>
</table>

S. No.	Particulars	Details	Remarks
	ely Polluted area as per 2018 CEPI score.		

28.7.8: The unit configuration and capacity of existing and proposed project is given as below:

S. N.	Existing Power Plant configuration and capacity	Proposed power plant configuration and capacity	Total Capacity	Technology adopted
1.	Telangana STPP Phase-I 2x800 MW (1600 MW)	Telangana STPP Phase-II 3X800 MW (2400 MW)	4000 MW	**Phase-I:** Ultra Super Critical with Water-Cooled Condenser System **Phase-II:** Ultra Super Critical Technology with Air-Cooled Condenser System

28.7.9: The details of the fuel (coal/LDO) requirement for the proposed project/ expansion cum proposed project along with its source and mode of transportation is given as below:

Details	Fuel requirement. (MTPA)	Source	Distance from site (kms)	Mode of Transpor-tation	Coal/LDO characteristics (Worst case scenario)	Linkage document
Existing TPP Phase-I (2x800 MW)	8 million TPA at 90% PLF	SCCL	15-300	Rail	Ash: 38-43(%) Sulphur: 0.4-0.6 (%) Moisture: 14 % GCV: 3300-3800 Kcal/Kg	Fuel Supply Agreement available with Singareni Collieries Company Limited.
LDO for Phase-I	8000 KL	BPCL, HPCL	590 KM	ROAD	Sulphur:1.5 % Max. GCV: 9000-10000 Kcal/Kg (approx.) As per applicable IS: 15770:2008	Purchase Orders for Supply of LDO
Proposed TPP Phase-II (3x800 MW)	11.70 Million TPA at 90% PLF considering 3800 Kcal/kg	SCCL	15-300	Rail	Ash: 38-43(%) Sulphur: 0.4-0.6 (%) Moisture: 14 % GCV:3300-3800 Kcal/Kg	SLC (LT) in its meeting dated 03.01.2024, has recommended Coal supply from SCCL.
LDO for Phase-II	9000 KL	BPCL, HPCL	590 KM	ROAD	Sulphur:1.5 % Max. GCV: 9000-10000 Kcal/Kg (approx.) As per applicable IS: 15770:2008	-

28.7.11: Power requirement: Existing power requirement of 92MW is obtained from Telangana STPP Phase-I. The power requirement for the proposed project is estimated as 162 MW, which will be obtained from the own generation.

28.7.12: Baseline Environmental Studies:

Period	From March 2024 to May 2024	Additional study (if any)
AAQ parameters at 10 locations (min. & max.)	• PM_{10} = 48 - 90 µg/m^3 • $PM_{2.5}$ = 28 - 50 µg/m^3 • SO_2 = 5 - 17 µg/m^3 • NO_x = 14 - 32 µg/m^3 • CO = 0.39 - 0.62 mg/m^3	---
Incremental GLC Level	**PROPOSED TELANGANA PHASE-II PROJECT** • PM_{10} = 0.566 µg/m^3 (Level at 1.25 km in NNW direction) • $PM_{2.5}$= 0.338 µg/m^3 (Level at 1.25 km in NNW direction) • SO_2 = 24.4 µg/m^3 (Level at 1.25 km in NNW Direction) • NO_2 =1.88 µg/m^3 (Level at 1.25 km in NNW direction) (@100 mg/nm^3) • NO_2 = 9.44 µg/m^3 (Level at 1.25 km in NNW direction) (@300 mg/nm^3) **Proposed measures for monitoring and Control of Air Pollution:** • High efficiency Electrostatic Precipitator (ESP) to control PM emissions with 275 m high stack for wider dispersion. • Use of Low-NOx burners and Over Fire Air to control NO_x emissions. • Dust Suppression system in coal handling and ash handling areas. • Regular maintenance of equipment to ensure efficient functioning. • Continuous Emission & Ambient Air Quality monitoring systems.	---
Ground water quality at **6** locations	pH: 7.05 to 7.51, Total Hardness: 316 to 436 mg/l, Chlorides: 80 to 142 mg/l, Fluoride: 0.14 to 0.26 mg/l. Heavy Metals: Fe: 0.154 to 0.254 mg/l, Cu: 0.005 to 0.025 mg/l, Zn: 0.025 to 0.442 mg/l, As :0.006 to 0.025 mg/l.	---
Surface water Quality at **6** locations	pH: 7.15 to 7.52; DO: 5.2 to7.9 mg/l and BOD: from 3.8 to 9.0 mg/l. COD: from 30 to 74 mg/l	
Effluent generation details and its treatment	**<u>Phase-I: Existing</u>** Plant Effluent generation: 62,400 KLD Wastewater Treatment / ETP Capacity: 31,200 KLD Mode of treatment & reuse: Neutralization for DM plant regeneration wastewater, Settling pit for Coal Settling, Oil Removal, Lamella clarifier/Tube settler for service water. Treated Wastewater utilization in Cooling water makeup, dust suppression, ash handling, horticulture etc. within the plant maintaining Zero Liquid discharge (ZLD). Rest of the effluents (31,200 KLD) shall be reused/recycled and Zero Liquid Discharge shall be maintained. Domestic Effluent Generation: 1,920 KLD STP Capacity: 3,500 KLD + 75 KLD STP additional Mode of treatment & reuse: STP (MBBR Technology) and Tertiary Treatment and effluent recycling in horticulture maintaining Zero Liquid discharge (ZLD).	
	<u>Phase-II: Proposed</u> Plant Effluent generation: 32,040 KLD Wastewater Treatment / ETP Capacity: 8,160 KLD Mode of treatment & reuse: Neutralization for DM plant regeneration wastewater, Settling pit for Coal Settling, Oil Removal, Lamella clarifier/Tube settler for service water. Treated Wastewater utilization in Aux. Cooling water makeup, dust suppression, ash handling, horticulture etc. within the plant maintaining Zero Liquid discharge (ZLD).	

<table>
<tr><td>Period</td><td>From March 2024 to May 2024</td><td>Additional study (if any)</td></tr>
<tr><td></td><td>Rest of the effluents (23,880 KLD) shall be reused/recycled and Zero Liquid Discharge shall be maintained.
Domestic Effluent Generation: 576 KLD
STP Capacity: Existing 3,500 KLD + additional 75 KLD
Mode of treatment & reuse: STP with Tertiary Treatment and effluent recycling in horticulture maintaining Zero Liquid discharge (ZLD).</td><td></td></tr>
<tr><td>Noise levels (Day and Night)</td><td>40.1 dB(A) to 52.5 dB(A) for the daytime and 35.4 dB(A) to 42.8 dB(A) for the Nighttime.</td><td></td></tr>
<tr><td>Traffic assessment study findings</td><td>• Transportation of raw material (coal) will be done 100 % by rail.
• Coal is being transported by rail for the existing units and same is envisaged for coal transportation for the expansion as well.
• Rail Loading Facility has been provided for Dry Ash Loading and transportation also.
• Due to increase in economic activities, the existing vehicular movements may slightly increase with the proposed expansion.
• However, there shall be no significant impact due to use of Rail Transportation for coal and direct road connectivity with SH-1 which is passing nearby the project site.</td><td></td></tr>
<tr><td>Soil Quality at 10 Locations</td><td>pH range 7.08 to 7.46; Electrical conductivity (EC): 328 to 396 µmhos/cm; Potassium: 96.3 to 100.5 mg/kg; Nitrogen: 141.8 to 144.9 mg/kg; Phosphorous: 6.6 to 8.4 mg/kg; Cation Exchange Capacity (CEC): 13.92 to 16.84 meq/100 gm.</td><td></td></tr>
<tr><td>Flora & Fauna</td><td>List of schedules-I fauna and endangered Flora if any.: Yes
List of schedules-I species within the study area is as given below:
<table>
<tr><th>S. N.</th><th>Scientific Name</th><th>Common Name</th><th>IUCN</th></tr>
<tr><td>1</td><td>Melursus ursinus</td><td>Sloth Bear</td><td>VU</td></tr>
<tr><td>2</td><td>Hystrix indica</td><td>Indian porcupine</td><td>LC</td></tr>
<tr><td>3</td><td>Panthera pardus</td><td>Common Leopard</td><td>VU</td></tr>
<tr><td>4</td><td>Panthera tigris</td><td>Tiger</td><td>EN</td></tr>
<tr><td>5</td><td>Herpestes edwardsii</td><td>Common mongoose</td><td>LC</td></tr>
<tr><td>6</td><td>Canis lupus</td><td>Indian Wolf</td><td>LC</td></tr>
<tr><td>7</td><td>Cuon alpinus</td><td>Indian wild Dog</td><td>EN</td></tr>
<tr><td>8</td><td>Canis aureus</td><td>Jackal</td><td>LC</td></tr>
<tr><td>9</td><td>Lutra lutra</td><td>Common Otter</td><td>NT</td></tr>
<tr><td>10</td><td>Ratufa indica</td><td>Indian Giant squirrel</td><td>LC</td></tr>
<tr><td>11</td><td>Rusa unicolor</td><td>Sambar</td><td>VU</td></tr>
<tr><td>12</td><td>Tetracerus quadricornis</td><td>Four -Horned Antelope</td><td>VU</td></tr>
<tr><td>13</td><td>Naja naja</td><td>King Cobra</td><td>LC</td></tr>
<tr><td>14</td><td>Python molurus</td><td>Indian Python</td><td>VU</td></tr>
<tr><td>15</td><td>Crocodilus palustris</td><td>Crocodiles</td><td>VU</td></tr>
<tr><td>16</td><td>Vipera russellii</td><td>Russell's Viper</td><td>LC</td></tr>
<tr><td>17</td><td>Pavo cristatus</td><td>Peafowl</td><td>LC</td></tr>
<tr><td>18</td><td>Milvus migrans</td><td>Black Kite</td><td>LC</td></tr>
</table>
Wildlife Conservation Plan with budgetary provision of Rs.2.92 Crores has been prepared for Sch.-I species and it has been approved by Principal Chief Conservator of Forests (PCCF) vide letter ref. WL-1/WL07/32/2024-WLS dated 26.03.2025.
Further, vide letter dated 12.08.2025, DFO-Peddapally clarified that the Tiger movement in 10 km study area is sporadic only and Indian Wolf & Indian Wild Dog are not sighted in last three years in 10 km study area.</td><td>Wildlife conservation plan prepared by M/s. Mantec Consultants Pvt. Ltd. in consultation with State Forest Dept. and the same has been approved by PCCF, Telangana.</td></tr>
</table>

<table>
<tr><td>Period</td><td>From March 2024 to May 2024</td><td>Additional study (if any)</td></tr>
<tr><td>Hydrogeology study</td><td>Recommendations of the Hydrogeology study:
<table>
<tr><th>S.N.</th><th>Study Recommendation</th><th>Proposed Action Plan</th><th>Estimated Expenditure & Target Date</th></tr>
<tr><td>1</td><td>Groundwater Quality Monitoring</td><td>Monitoring wells installation, Quarterly testing of water quality</td><td>13.4 Lakhs
(0-6 months)</td></tr>
<tr><td>2</td><td>Development of Artificial Recharge Structures</td><td>Recharge wells, Recharge trenches, pond rehabilitation</td><td>28.0
(6-18 months)</td></tr>
<tr><td>3</td><td>Tree Plantation, Greenbelt Development</td><td>Tree Plantation & maintenance</td><td>45.00
(6-18 months)</td></tr>
<tr><td>4</td><td>Develop Monitoring systems</td><td>Equipments for monitoring, data management</td><td>10
(18-60 months)</td></tr>
<tr><td></td><td colspan="2">Total Budgetary provision, Rs. Lakhs</td><td>96.40</td></tr>
</table></td><td>Consultant details: Mantec Consultants Pvt. Ltd.</td></tr>
<tr><td>Impact study on biodiversity and aquatic ecology</td><td>Impact on Terrestrial Ecology
The initial construction phase of the project entails clearing the land, which may disturb vegetation during the process, though the extent of this disturbance is deemed insignificant. The effects of construction will mainly be localized to the Phase-II site, which is relatively small. Earthwork activities like excavation and filling may generate fugitive dust emissions, potentially depositing on nearby vegetation's young, growing leaves and temporarily inhibiting photosynthesis. However, these effects are anticipated to be mostly limited to the early stages of construction and can be mitigated by implementing measures such as paving, surface treatment, water spraying, and tree planting initiatives. Furthermore, these impacts are expected to be contained within the plant's boundaries, resulting in marginal overall impact from the construction activities.
Impact on Aquatic Ecology
The drainage from construction sites can cause a temporary rise in suspended solids and a drop in dissolved oxygen levels near where it enters a body of water. This could result in a temporary reduction in the photosynthetic capacity of phytoplankton, an increase in anaerobic conditions, and alterations in the food chain due to the decrease in dissolved oxygen levels. The proposed expansion project is envisaged with water & wastewater treatment plants, sewage treatment plant and Zero Liquid Discharge system. Hence, there will be no discharge into the water bodies and there will be no negative impact on aquatic ecology.</td><td>Consultant details: Mantec Consultants Pvt. Ltd.</td></tr>
<tr><td>Risk assessment study</td><td>Recommendations of Risk assessment report with mitigation measures:
1. Ensure that the facilities should have necessary fire and gas detection system in the Plant as per applicable guidelines. Operators should be well trained about the detection system.
2. Mock drills to be well rehearsed to ensure readiness to handle emergency.
3. All the valves and pipeline should be periodically maintained and inspected to prevent the failures.
4. Calibration of all instruments to be ensure periodically.
5. The company shall train all employees in Emergency Response, Fire Fighting and First Aid.
6. Proper lighting arrangements and CCTV as per applicable OISD guidelines should be provided at Plant.
7. HCl, H_2SO_4 and Alkali (NaOH) are used for water treatment. These acids and alkali are stored in storage vessels at atmospheric conditions. The noteworthy safety features involved are detailed below:
• The vessels for alkali and acid storages are provided with the rubber lining of proper material.
• All the storage vessels have been provided with dike for the containment of spill</td><td>Consultant details: Mantec Consultants Pvt. Ltd.</td></tr>
</table>

Period	From March 2024 to May 2024	Additional study (if any)
	age from the storage vessels. The dike and the handling area are provided with acid/ alkali proof brick linings. • Eye wash and safety showers are available in the vicinity of these storage vessels. • The workers have been provided with the required type of PPE, Chemical Protective Clothing, Splash Goggles, Boots, safety Shoes, Gloves, etc. • There is provision of sampling for each lot of acid /alkali before it is unloaded or used in the plant premises. It ensures the safety to equipment and the plant personnel.	
Marine impact assessment study. (Only for coastal based TPPs)	Not Applicable	-

28.7.13: Solid and hazardous waste management: The details of solid and hazardous waste generation along with its mode of treatment/disposal are furnished as below:

Estimated waste generation w.r.t Proposed Telangana Phase-II (3x800 MW)

S.N.	Type of Waste	Source	Estimated Quantity, MTPA	Mode of Treatment	Mode of Disposal	Remarks
Hazardous Waste						
1	Toxic metal containing residue from used ion exchange material in water purification	Water Treatment Plant	4.5 MT	NIL	Co-processing at Cement Industry / Incineration at TSDF/ AFR Facility	-
2	Used Resin	Water Treatment Plant	3.75 KL	NIL	Authorized TSDF	
3	Oil Soaked fuller's earth	Maintenance Activities	3.0 MT	NIL	Authorized TSDF/ Co-processing at Cement Industry	
4	Filters contaminated with oil (Used oil filters / Used Air filters)	Maintenance Activities	300 Nos	NIL	Authorized TSDF	
5	Contaminated cotton rags or other cleaning Materials	Maintenance Activities	5 MT	NIL	Co-processing at Cement Industry/ AFR Facility for preprocessing /TSDF	

S.N.	Type of Waste	Source	Estimated Quantity, MTPA	Mode of Treatment	Mode of Disposal	Remarks
6	Spent Activated Carbon	Water Treatment Plant	4.5 MT	NIL	Co-processing at Cement Industry/ AFR Facility for preprocessing / TSDF	
7	Used Insulation Material (Glass Wool / Mineral Wool)	Maintenance Activities	300 MT	NIL	Authorized TSDF	
8	Silica Gel	O&M activities	1.5 MT	NIL		
9	Spent of Hydraulic Oil- transformer Oil, Used lube Oil.	O&M activities	225 KL	NIL	Authorized Re-Processors/ Recyclers	
10	Detoxified containers & container liners of Hazardous waste and hazardous chemicals.	Chemical Treatment	450 Nos./Month	NIL	Authorized Recycler	
11	Used oil grease drums	O&M activities	750 Nos. /Month	NIL	Authorized Recycler	
12	Waste Oil	O&M activities	150 KL	NIL	Authorized Re-Processors/ Recyclers / TSDF	
13	Oil tank sludge	O&M activities	1.5 MT	NIL	Authorized Re- processors/TSDF	
Non-Hazardous Waste						
S.N.	**Type of Waste**	**Source**	**Estimated Quantity, MT**	**Mode of Treatment**	**Mode of Disposal**	**Remarks**
1	Ferrous Scrap	O&M activities	835.5	NIL	Disposed through e-auction by MSTC	The quantity estimated based on annual waste generation during FY 2024–25.
2	Non-Ferrous Scrap	O&M activities	8.85	NIL	Disposed through e-auction by MSTC	
Municipal Solid Waste						

S.N.	Type of Waste	Source	Estimated Quantity, MTPA	Mode of Treatment	Mode of Disposal	Remarks
S.N.	**Type of Waste**	**Source**	**Estimated Quantity, MT**	**Mode of Treatment**	**Mode of Disposal**	**Remarks**
1	Biodegradable Waste	Domestic Waste	39	NIL	Bio-methanation Plant, Vermi-composting / Conventional composting	The quantity is based on the waste generated during FY 2024-25 from the Townships at NTPC Ramagundam, Telangana.
2	Non-Biodegradable Waste	Domestic Waste	23	NIL	Waste to Energy Plant /Recyclers	
Biomedical Waste						
S.N.	**Type of Waste**	**Source**	**Quantity Generated, MT**	**Mode of Treatment**	**Mode of Disposal**	**Remarks**
1	Biomedical Waste	Hospital in NTPC Township	0.0850	NIL	Disposed through authorized Recycler	The Hospital, situated in the NTPC Townsship, is a common facility for NTPC Ramagundam & Telangana Power Stations.
E-Waste						
S.N.	**Type of Waste**	**Source**	**Quantity Generated, MT**	**Mode of Treatment**	**Mode of Disposal**	**Remarks**
1	E-Waste	Office	5.59	NIL	Disposed through authorized Recycler/ TSDF	

28.7.14: Public Consultation

Details of advertisement given	Eenadu Telugu News Paper 23.10.2024, 02.12.2024, 08.01.2025 Deccan Chronicle English News Paper 23.10.2024, 02.12.2024, 08.01.2025
Date of public consultation	28.01.2025 at 11:00 A.M.
Venue	Zila Parishad High School, NTPC-Jyotinagar, Ramagundam Mandal, District- Peddapalli
Presiding Officer	1. Sri K. Sree Harsha-Collector & District Magistrate, Pedaapalli District 2. Sri B. Bhikashapathi Environmental Engineer, Telangana Pollution Control Board, Regional Office, Ramagundam

Major issues raised	Provision of Employment to locals, increase CSR works, road and school infrastructure, pollution due to power plant, skill development training
No. of people attended	228 Nos. (as per signature taken by TGPCB) Actual attendees > 1000 nos.

Action plan as per MoEF&CC O.M. dated 30/09/2020:

S. No.	Key Area Identification for Activities Based on Public Needs Highlighted During Environmental Public Hearing	Year-wise Proposed Expenditures (Rs. In Crores)					Total Proposed Expenditure (Rs. In Crores)	Physical Targets
		1st	2nd	3rd	4th	5th		
A	**Educational Initiatives**							
1	Rehabilitation of mentally handicapped children of Manochaithanya.	0.10	0. 10	0.15	0.15	-	**0.50**	Financial support to Manochaithanya for rehabilitation of mentally handicapped children and Tie-up for utilization of products made by Manochaithanya as per the proposal.
2	Support rural primary education for weaker sections.	0.40	0.20	0.20	0.20	0.20	**1.20**	Distribution of water coolers, Smart classrooms systems, Books, cycles to schools of Anthergaon area, Rompikunta, Jangaon, manthani areas.
3	School facility in Elkalapalli	-	-	0.20	0.80	-	**1.00**	Additional 4 rooms in existing school building in Elkalapalli.
	Sub Total	**0.50**	**0.30**	**0.55**	**1.15**	**0.20**	**2.70**	
B	**Community Health Initiatives**							
4	Aids for Primary health centre & Veterinary hospital in Elakalapalli and other area	0.30	0.30	0.30	0.30	0.30	**1.50**	Health equipment's will be provided to Govt. PHC & Govt. veterinary hospital as per requirement near project vicinity.
5	Medical Facilities	1.00	1.00	1.00	1.00	1.00	**5.00**	Medical camps will be conducted through Mobile Medical Unit with two doctors (including 01 lady doctor) for general health check-up, ANC & PNC check-up etc in all the project affected

S. No.	Key Area Identification for Activities Based on Public Needs Highlighted During Environmental Public Hearing	Year-wise Proposed Expenditures (Rs. In Crores)					Total Proposed Expenditure (Rs. In Crores)	Physical Targets
		1st	2nd	3rd	4th	5th		
								villages. Free Medicines distribution during medical camps. Other than this, oral cancer detection camp, dental camp will be conducted for children and others.
	Sub Total	**1.30**	**1.30**	**1.30**	**1.30**	**1.30**	**6.50**	
C	**Sustainable Livelihood and Women Empowerment**							
6	Women welfare and other development activities.	0.50	0.50	0.50	0.50	0.50	**2.50**	Development of infrastructure & training of local women for dairy farms, poultry, agriculture, food processing, plastic moulding
		0.50	0.50	0.50	0.50	0.50	**2.50**	Vocational training to local women for skill development
	Sub Total	**1.0**	**1.0**	**1.0**	**1.0**	**1.0**	**5.00**	
D	**Community Rural Infrastructure Development**							
7	Road works in Malkapur village.	-	0.50	0.50	0.50	1.00	**2.50**	CC road laying 3 Kms approx.
8	Infrastructure facilities at Ramagundam.	4.00	4.00	5.00	5.00	2.00	**20.00**	Medipalli Crossroad to Medipalli village: CC/BT Road from Greenery, Central lighting & Dividers Internal CC roads, storm water drains & Underground drains in Annapurna colony, Auto nagar, Shalapally, poratpalli, CP office, Malkapur, nallah channelisation works in medipally area. Desilting at Ramagundam Cheruvu & Park development in Malkapur area.
9	Laying of CC Roads (	0.50	0.50	-	-	-	**1.00**	CC road will be cons

S. No.	Key Area Identification for Activities Based on Public Needs Highlighted During Environmental Public Hearing	Year-wise Proposed Expenditures (Rs. In Crores)					Total Proposed Expenditure (Rs. In Crores)	Physical Targets
		1st	2nd	3rd	4th	5th		
	2 Kms approx) in Penchikalpet.							tructed in Penchikalpet village as per proposal.
10	CC Road laying Road along with Side drain works from Penchikalpet to Repallewada.	0.50	1.00	0.50	-	-	**2.00**	CC road will be constructed in Penchikalpet to Repallewada village as per proposal.
11	Laying of CC Road Errakunta at Laxmipur lake way Road.	0.50	1.00	0.50	-	-	**2.00**	CC road will be constructed in Errakunta at Laxmipur village as per proposal.
	Sub Total	**5.50**	**7.00**	**6.50**	**5.50**	**3.00**	**27.50**	
E	**Development of Playgrounds for Sports**							
12	Conducting Rural sports Programs in every year in all PAV's.	0.20	0.20	0.20	0.20	0.20	**1.00**	Rural sports will be conducted for school children of govt school in the nearby area and promoting local sport with sponsorship.
	Sub Total	**0.20**	**0.20**	**0.20**	**0.20**	**0.20**	**1.00**	
F	**Development of local youth & women for various activities at village level**							
13	Distribution of agriculture implements in Elkalapalli and others.	0.20	0.20	0.20	0.20	0.20	**1.00**	Distribution of agricultural implements & seeds. Training will be provided for using new technologies such as solar pump in agriculture and providing equipment.
14	Avenue plantation in Penchikalpet.	0.20	-	-	-	-	**0.20**	Raising of Avenue plantation through self-help groups. Distribution of fruit yielding saplings.
15	Skill development programs in Elkalapalli.	0.30	0.30	0.30	-	-	**0.90**	Training programs for professional services, competitive exams, physical fitness for police recruitment, pl

S. No.	Key Area Identification for Activities Based on Public Needs Highlighted During Environmental Public Hearing	Year-wise Proposed Expenditures (Rs. In Crores)					Total Proposed Expenditure (Rs. In Crores)	Physical Targets
		1st	2nd	3rd	4th	5th		
								astic moulds, Tailoring etc for local youth in Elkalapalli.
	Sub Total	**0.70**	**0.50**	**0.50**	**0.20**	**0.20**	**2.10**	
G	**Providing water facilities to PAV's**							
16	Drinking Water supply arrangement in Kundanpalli village.	0.50	0.25	0.25	-	-	**1.00**	Pump house readiness, Pipeline laying till OH tank, Distribution lines connection.
17	Drinking Water supply arrangement in Moghalpad village.	0.30	0.70	-	-	-	**1.00**	Extension of lines from pump house till Moghalpahad Distribution lines connection.
18	RO Drinking Water plants at various villages.	0.25	0.50	0.50	0.25	-	**1.50**	New RO plant in Palakurthy, anthergaon and uplifting of existing 33 nos. RO plants at other villages.
19	Providing New RO plant at Mathangi colony.	0.20	0.10	-	-	-	**0.30**	RO plant will be provided to Mathangi Colony.
20	Desilting/Dredging of Chinthala water tank.	0.10	0.10	0.10	-	-	**0.30**	Desilting/ Dredging of Chinthala water tank.
	Sub Total	**1.35**	**1.65**	**0.85**	**0.25**	**-**	**4.10**	
H	**Sanitation**							
21	Drainage system development in Mathangi Colony.	0.50	-	-	-	-	**0.50**	Drainage system development in Mathangi Colony.
	Sub Total	**0.50**					**0.50**	
	Total (A+B+C+D+E+F+G+H)	**11.05**	**11.95**	**10.90**	**9.60**	**5.90**	**49.4**	

**The amount and year-wise phasing is tentative which shall be finalized after consultation with stakeholders and District Administration.*

28.7.15: Cost of project: Existing capital cost of project was Rs.13,708.00 Crores. The capital cost of the proposed project is Rs.27,683.29 Crores and the capital cost for environmental protection measures is proposed as Rs. 2,510.95

Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 50.11 Crores. The employment generation from the proposed project / expansion is approx. 96 nos. & 216 nos. permanent employment during construction and operation phases respectively and approx. 3500 nos. & 1500 nos. contractual employment during construction and operation phases respectively. The details of cost for environmental protection measures are as follows:

S. No.	Item Description	Capital Cost, Rs. in Crores	Recurring Cost, Rs. in Crores
1.	Electrostatic Precipitator	605.72	12.11
2.	Chimney	228.00	4.56
3.	Aux. Cooling Towers incl. Civil Works	35.44	0.71
4.	Ash Handling System	1096.45	21.93
5.	Ash Dyke	150.00	3.0
6.	Ash Water Recirculation incl. ETP	311.73	6.23
7.	Dust extraction & suppression System	8.00	0.16
8.	DM plant, Waste Treatment systems	5.00	0.10
9.	Sewerage collection, treatment & disposal	2.00	0.04
10.	Rainwater Harvesting	0.64	0.01
11.	Green Belt, Afforestation & Landscaping	55.97	1.12
12.	Environmental Lab Equipment	0.50	0.01
13.	Environmental Monitoring Systems	6.40	0.13
15.	**Provision for Implementation of study recommendation**		
a.	Wildlife Conservation through Forest Dept.	2.92	--
b.	Watershed Development Plan	0.96	--
c.	Hydrogeology Study Recommendation	1.22	--
	TOTAL	2,510.95	50.11
1	Addressal of Public Consultation issues	49.4	--

28.7.16: Green belt development: Existing green belt has been developed in 125.95 ha area which is about 29.72 % of the total plant area of 423.717 ha with total sapling of 3.10 lakh Trees. Proposed greenbelt will be developed in 66.03 ha which is about 15.5 % of the total plant area of 423.717 ha. Thus, total of 191.968 ha area (45.3% of total plant area 423.717ha) will be developed as greenbelt. A 5 m - 50 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 2,67,200 saplings will be planted and nurtured in 66 hectares in 6-7 years.

28.7.17: Ash management (for last three years)

Year	Quantity Generated (MT)	Quantity utilized (MT)	% of Utilization	Balance Quantity (MT)	No of storage silos with capacity
2022-23	--	--	--	--	HCSD Silo: 700 MT x 3 Nos. Fly Ash Silo: 1180 MT x 4 Nos.
2023-24	6,81,000	0	0	6,81,000	
2024-25	27,35,982	7,46,785	27.29	26,70,197	

A. Fly ash details for last 3 years: 7,46,785 TPA (For FY 2024-25)

S. No.	Activity (as applicable)	Quantity Utilized, MT	Percentage of Total Fly Ash	Remarks (Prior approval of SPCB details to be mentioned)
1	Fly ash-based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	4,61,169	16.85	NA
2.	Cement manufacturing	2,38,043	8.70	NA
3.	Ready mix concrete	44,523	1.63	NA
4.	Construction of dams	3,050	0.11	NA
	Total	**7,46,785**	**27.29**	

B. Bottom Ash details for last 3 years: Nil

C. Legacy ash details:

All the two ash lagoons are operational since 2023-24, hence there is no legacy ash.

Unutilized Ash available in current compliance cycle is 26,70,197 MT at the end of 2024-25 which shall be utilized in subsequent years by 2025-28 as per the compliance cycle timeline.

D. Ash Pond Details: - Phase-I (Existing Ash Pond)

S.No	Details of Ash Pond	Ash Pond 2	Ash Pond 3	Total
	Status of ash pond (Active/Exhausted, yet to be reclaimed/ Reclaimed)	Active	Active	
	Area (Ha)	38.46	38.46	80.97 (incl. 4.05 Ha. for OFL) Active Ash Ponds
	Dyke height (m)	6 - 12 mtrs	2 - 13 mtrs	The dyke height varies as per Topography
	Volume (m^3)	24.50	20.50	
	Quantity of ash disposed (Metric Tons)	6.20	20.50	4.65 LMT/20.50 LMT lifted from dyke
	Available volume in percentage and quantity of ash can be further disposed (Metric Tons)	74.6% (18.30MT)	22.68% (4.65MT)	In ash utilization pits

S.No	Details of Ash Pond	Ash Pond 2	Ash Pond 3	Total
	Expected life of ash pond (number of years and months)	9 Months	2 Months	Considering Nil ash utilization
	Type lining carried in ash pond: HDPE lining of LDPE Inning or clay Inning or No lining	HDPE	HDPE	
	Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD)	Wet (HCSD)	Wet (HCSD)	Bottom ash and HCSD are discharging in two separate places in same lagoon
	Ratio of ash: water in slurry mix (1:..)	65%:35%	65%:35%	
	Ash water recycling system (AWRS) installed and functioning: Yes or No	Yes	Yes	AWRS available and functioning
	Quantity of wastewater from ash pond discharged into land or water body (m^3)	NA	NA	Seepage water in toe drains pumped back to OFL through 2 Nos. seepage water pump houses
13.	Last date when the dyke stability study was conducted and name of organization who conducted the study:	21.11.2024 by NIT Warangal		Safe & Stable
14.	Last date when the audit was conducted and name of the organization who conducted the audit:	17 – 19 Oct'2024 by NIT Warangal		No abnormality found

E. Proposed ash utilization plan for expansion project:

Details	Existing generation (MTPA)	Proposed generation (MTPA)	Total (MTPA)	Utilization (MTPA)	% of utilization	Balance quantity (MTPA)	No. of storage silos with capacity
Ash (Fly & Bottom)	27.35	41.02	68.37	68.37	100	NIL	**Dry Fly Ash Silos:** Main Silos: 5 x 2500 MT + 1 x 2000 MT with truck and Wagon loading facilities. HCSD Silos: 3 x 700 MT with truck loading facility only. **Bottom Ash Silos:** Main Bottom Ash Silos: 3 x 1500 MT with truck a

Details	Existing generation (MTPA)	Proposed generation (MTPA)	Total (MTPA)	Utilization (MTPA)	% of utilization	Balance quantity (MTPA)	No. of storage silos with capacity
							nd wagon loading facilities. Bottom Ash Intermediate Silo: 3 x 500 MT with truck loading facility only.

Ash Pond details: If existing ash pond is to be utilized details may be mentioned. If not, new ash pond details may be provided as below:

Ash Pond details: For Proposed ash pond

S. N.	Details of Ash Pond	Ash Pond
1.	Area (Ha)	120 Ha (including space required for ash disposal, decanted area, overflow lagoon, dyke embankment, toe drains, peripheral roads, ash pipe corridor, AWRS pump house and other facilities etc.).
2.	Dyke height (m)	One HCSD Lagoon: 12.0 M (avg) Starter dyke and two Raising of 3.0 M height. One BA Lagoon: 12.0 M (avg) Starter dyke and two Raisings of 3.0 M height each
3.	Volume (m^3)	Approx. 12 million m^3 (Ash disposition)
4.	Quantity of ash to be disposed (Metric Tons)	Approx. 12 million Metric Tons (Considering density as 1.0 T/cum)
5.	Expected life of ash pond (number of years and months)	02 years and 06 months (considering nil ash utilization) Originally ash pond area of 246.858Ha was envisaged considering proposed plant requirements due to uncertainties in 100% ash utilisation and was in line with MoEF&CC Notification dated 31.12.2021. However, as per direction given by Chairman EAC during EAC Meeting for optimization of new ash dyke area of Phase-II, the same is reduced from 246.858 Ha to 120 Ha. In the permitted 120 Ha ash pond, combined ash storage capacity of 01 HCSD lagoon and 01 BA lagoons is 12 million Metric Tons (approx.). Expected ash storage life of ash pond is approximately 2 years and 6 months (considering yearly ash generation of approx. 5 million Metric tons).
6.	Type lining carried in ash pond: HDPE lining of LDPE lining or clay lining or No lining	Suitable impervious lining as per actual site conditions meeting the imperviousness requirements as per standard “Guidelines for Design, Construction, O&M and Annual certification of Coal Ash Ponds-June 2023” to be provided. Accordingly, HDPE lining system is envisaged in OFL and Bentonite blended lining in all ash storage lagoons.
7.	Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD)	Wet Slurry Disposal for Bottom Ash (LCSD) & High Concentration Slurry Disposal (HCSD) system for Fly Ash.

S. N.	Details of Ash Pond	Ash Pond
8.	Ratio of ash: water in slurry mix	Maximum 25% ash on dry ash basis, rest is water for LCSD Slurry, 55% to 65% (Average-60%) of ash on dry ash basis, rest is w ater for HCSD slurry.
9.	Ash water recycling system (AWRS):	Ash water recycling system has been envisaged for the propo sed project.
10.	Quantity of wastewater from ash pond to be discharged into land or water body (m 3)	Ash Water Recirculation System and Zero Liquid Discharge system envisaged for the proposed expansion project. No was tewater discharge is envisaged.
11.	Details regarding dyke stability study and name of the organization who conducted t he study.	As already done in all past ash dyke stability design, this will also be done by NTPC, (in-house design) in line with “CEA a nd CPCB Guidelines for Design, Construction, O&M and An nual certification of Coal Ash Ponds”.

Proposed Ash Utilization Plan

MoEF& CC Com pliance C ycle	Year	Ash Ge ne -ration (LM T)**	Backlo g ash (LMT)	Ash De velop -ment (LMT)	Outsid e Brick s (in M T)	Own B rick Pl ant (L MT)	Cement & Other Industri es (LM T)	Roads Constru c -tion (L MT)	Ash Bas ed Prod ucts (L MT)	Mines filling (LMT)	Total A sh Utili zed (L MT)	Ash Utili zation (%)
	Operation from Existing 2x800MW											
First	FY 2 023- 24	6.81		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	FY 2 024- 25	27.36		0.00	3.72	0.89	2.83	0.00	0.03	0.00	7.47	27.30
	FY 2 025- 26	27.35	4*	0.00	7.35	0.00	14	10.00	0.00	0.00	31.3 5	112
	FY 2 026- 27	27.35	4.34*	0.00	6.69	0.00	20.00	5.00	0.00	0.00	31.6 9	113
	FY 2 027- 28	27.35	5.00*	0.00	7.35	0.00	20.00	5.00	0.00	0.00	32.3 5	118
Secon d	FY 2 028- 29	27.35		0.00	7.35	0.00	20.00	0.00	0.00	0.00	27.3 5	100.0 0
	With commissioning of Phase-II (Unit-I) in 2029: Operation from 2x800MW + 1x800MW											
	FY 2	41.02		0.00	8.00	0.50	23.00	4.52	0.00	0.00	36.0	87.81

	029-30										2	
	With commissioning of Phase-II (Unit-II) in 2030: Operation from 2x800MW + 2x800MW											
	FY 2030-31	54.70		0.00	13.00	1.67	32.00	13.03	0.00	0.00	59.70	109.14
Third	**With commissioning of Phase-II (Unit-III) in 2031: Operation from 2x800MW + 3x800MW**											
	FY 2031-32	68.37		0.00	12.00	0.83	35.00	20.54	0.00	0.00	68.37	100.00
	FY 2032-33	68.37		0.00	13.00	0.83	40.00	14.54	0.00	0.00	68.37	100.00
	FY 2033-34	68.37		0.00	14.00	0.83	45.00	8.54	0.00	0.00	68.37	100.00

***Out of unutilized ash mentioned at 17© above, quantity of 13.22 LMT of pond ash is non excavatable considering dyke safety and stability.**
**** Ash generation is calculated considering 80% PLF and 40% ash in coal**

28.7.18: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration shall be furnished.

A. **Summary of court cases:**

The details of litigation/Court cases pertaining to Telangana STPP are as follows:

S.N.	Case Number / Title	Name of the Court	Brief summary of the case	Last date of hearing	Next date of hearing	Direction/ Action taken by the PP
1	Appeal No. 6 of 2023	NGT	The EC order for Telangana STPP Phase-I was challenged in NGT. NGT issued the directions to MoEF&CC to direct NTPC for fresh studies and then direct the EAC to appraise the same and issue necessary amendment to the EC dated 20.01.2016 by incorporating additional conditions for the purpose. The case was disposed by NGT vide order dated 27.05.2021. Based on the additional studies and their outcome, EAC recommended MoEF&CC for grant of amendment in EC with additional conditions. Subsequently, the EC amendment dated 08.08.2022 was issued by MoEF&CC. An appeal was filed to condone the delay in filing the appeal which challenges the Environmental Clearance (for short "EC") granted on 08.08.2022. The appeal for condonation of delay was	Disposed of	Disposed of	Original Case (Appeal 46 of 2016) was disposed of vide NGT Order dtd. 27.05.2021. Appeal was dismissed by NGT order dated 05.07.2023.

S.N.	Case Number / Title	Name of the Court	Brief summary of the case	Last date of hearing	Next date of hearing	Direction/ Action taken by the PP
			dismissed.			
2	Arbitration FAO(OS) (Comm) No 280 of 2023	Delhi High Court	Arbitration matter Award was passed by the Tribunal on 14.09.2022 allowing all the claims of the TPL and also 75% cost of arbitration to TPL. The financial implication of the award is Rs. 89,67,37,204.00 on NTPC Ltd. NTPC had challenged the award before Delhi High Court under section 34 of Arbitration Act for Setting Aside the Award in which Judgment was pronounced on 31.07.2023 upholding the award in toto. Against the Judgement, NTPC has filed Section 37 Petition (appeal) before Divisional bench Delhi High Court on 27.09.2023.	11.08.2025	11.09.2025	Pending

B. Summary of Show Cause Notices:

S.N.	Issuing authority	Date	*Reasons for issuance of SCN	Status of reply to submission	Present status
1	Telangana State Pollution Control Board (TGPCB)	22.05.2024	Excursion of online environmental parameters during April 2024.	Reply submitted vide Letter dtd. 18.06.2024	
2.		18.06.2024	Excursion of online environmental parameters during May 2024.	Reply submitted vide Letter dtd. 04.07.2024	
3.		06.07.2024	Excursion of online environmental parameters during June 2024.	Reply submitted vide Letter dtd. 22.07.2024	
4.		21.08.2024	Excursion of online environmental parameters during July 2024.	Reply submitted vide Letter dtd. 07.09.2024	
5.		13.09.2024	Excursion of online environmental parameters during August 2024.	Reply submitted vide Letter dtd. 03.10.2024	
6.		24.12.2024	Excursion of online environmental parameters during November 2024.	Reply submitted vide Letter dtd. 10.01.2025	
7.		17.01.2025	Excursion of online environmental parameters during Dec 2024.	Reply submitted vide Letter dtd. 04.02.2025	

S.N.	Issuing authority	Date	*Reasons for issuance of SCN	Status of reply to submission	Present status
8.		08.02.2025	Excursion of online environmental parameters during January 2025.	Reply submitted vide Letter dtd. 27.02.2025	
9.		13.03.2025	Excursion of online environmental parameters during February 2025	Reply submitted vide Letter dtd. 01.04.2025	
10.		30.04.2025	Notice on observations raised during site inspection by RO, Ramagundam, on 10-11 April 2025. The observation was mostly regarding fugitive emissions from ash dyke and haul roads.	Reply submitted vide Letter Dtd. 09.05.2025 addressing all observations.	

**** Show Cause Notices received from TGPCB were mostly related to exceedances in NOx values. Necessary corrective actions such as Low-NOx burners and Over Fire Air system are being taken by NTPC to achieve prescribed emission norms.***

C. Summary of violation: There is no violation case pertaining to the project under the Environment Protection Act, 1986; Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980; the Wildlife (Protection) Act, 1972.

Written submissions

28.7.19: The proponent vide letter dated 14th August 2025 has submitted the following written submission as suggested by the EAC during the meeting.

1. Brief Summary of NGT issue pertaining to Telangana STPP Phase-I (2x800MW)

S.N.	Condition as per EC amendment dated 08.08.2022	Compliance Status
(i)	Area of Ash Pond shall be reduced by 50%. Reduced area (200Acre) of Ash Pond shall be used for Greenbelt development, out of which 30 acres land (50m width) shall be used for creating plantation barrier between water storage area and ash pond so as to avoid mixing pollutants in the water body. Plantation shall be done by Miyawaki technique with 90% survival rate.	Area of Ash Pond is reduced to 50% by abandoning Lagoon-I which is of 200 acres. During the period of 2023-24, 71200 plantations by Miyawaki method was done between the reservoir and ash dyke for creating plantation barrier between water storage area and ash pond area and >90% survival rate is maintained. For the financial year 2024-25, plantation of 33,000 plants has been done at Ash Pond in consultation with TGFDCL.
(ii)	HDPE lining shall be provided to the Ash Pond and the height of the Ash Pond shall not increase beyond 16m.	HDPE lining in Ash Pond Area is completed. Current height of the bund at the lowest point is 6m (including 1.5m of free board) and 2m at highest point (including 1.5m of free board). In future 3 raising of 3mts each will be carried. At the lowest point in the ash pond the height of the bund will be 6+9=15m and at the highest point height of the bund will be 2+9=11m.
(iii)	All other condition mentioned in EC dated 20.01.2016 shall remain unchanged.	Noted and being complied

2. Reduction in Ash Pond area for proposed expansion project and revision of land use break-up

In line with the directions given by Chairman & members of the Expert Appraisal Committee during EAC Meeting dated 13.08.2025, optimization of area for proposed ash dyke under Telangana STPP Phase-II has been considered reducing the original proposed area from 246.858 Ha. to 120 Ha.

The revised land-use and area break-up for Telangana STPP (Phase-I & Phase-II) is as given below:

Telangana STPP Land Break-up (in Ha.)				
Description		**Area for Phase-I (in Ha.)**	**Area for Phase-II (in Ha.)**	**Total Area (Phase-I & II) (in Ha.)**
A	**Main plant and associated facilities**	94.9	127.88	222.78
B	**Ash Dyke Area**	80.937	120	200.937
C	**Total area considered for Greenbelt calculation (A+B)**	175.837	247.88	423.717
D	**Greenbelt Area**	81.138	110.83	191.968
E	**Other Misc. Area**	-	122.8653	122.8653
F	**Total Area (C+D)**	**256.975**	**481.5753**	**738.5503**

Year	**Plantation**		**Location of Plantation**	**Approx Cost, Crores**	**Plant Species**
	Nos.	**Area, Ha.**			
2024-25	10000 *	4.01	Railway siding Phase-1	2.28	Banyan, Peepal, Neem, Jamun, Amla, Arjun, Kadamba, Sandalwood, Tamarind, Indian Almond, Teak, Indian Beech (Pongamia pinnata) etc.
	23000 #	9.31	Area between Phase 1 Ash Pond and South Plant Boundary	5.26	
2025-26	48000	4.8	Area between Balancing Reservoir & Phase 1 Ash Pond	7.2	
2026-27	46000	4	Area between Balancing Reservoir & Phase 1 Ash Pond	6.9	
2027-28	35975	14.39	Inside Lagoon-1	7.91	
2028-29	37500	15.03	Inside Lagoon-1	8.25	
2029-30	20025	8.01	Area between Ash pipeline and Track Hoppe	4.45	
2031-32	6200	2.48	North side of project near highway	1.36	
2032-33	40500	4	Around the Proposed Ash Dyke	6.5	
Total	**267200**	**66.03**		**50.11**	
Gap Filling Plantation					
2025-26	1000	0.5	Between Ash Pond & Plant Boundary	0.22	
2026-27	500	0.2	Between Reservoir & Ash Pond	0.1	

Year	Plantation		Location of Plantation	Approx Cost, Crores	Plant Species
	Nos.	Area, Ha.			
2027-28	500	0.2	Between Reservoir & Ash Pond	0.1	
2028-29	1000	1	Inside Lagoon-1	0.22	
2029-30	1000	1	Inside Lagoon-1	0.22	
2030-31	800	0.4	Area between Ash pipe and Track Hopper	0.18	
Total	**4800**	**3.3**		**1.04**	

#: Completed, *: In progress

In addition to the above, budget provision of Rs. 5.86 Crores has been envisaged for Carbon Sink Plantation on approx. 55 Ha. Degraded Forest Land in consultation with State Forest Dept.

4. Revised cost provisions for Environmental Measures: Cost provisions for the Environmental Measures has been revised as given below:

S. N.	Item Description	Capital Cost, Rs. in Crores	Recurring Cost, Rs. in Crores
1.	Electrostatic Precipitator	605.72	12.11
2.	Chimney	228	4.56
3.	Aux. Cooling Towers incl. Civil Works	35.44	0.71
4.	Ash Handling System	1096.45	21.93
5.	Ash Dyke	150	3
6.	Ash Water Recirculation incl. ETP	311.73	6.23
7.	Dust extraction & suppression System	8	0.16
8.	DM plant, Waste treatment systems	5	0.1
9.	Sewerage collection, treatment & disposal	2	0.04
10.	Rainwater Harvesting	0.64	0.01
11.	Green Belt, Afforestation & Landscaping	55.97	1.12
12.	Environmental Lab Equipment	0.5	0.01
13.	Environmental Monitoring Systems	6.4	0.13
14.	Implementation of Wildlife Conservation plan	2.92	--
15.	Implementation of Hydrogeology Study recommendation	0.96	--

S. N.	Item Description	Capital Cost, Rs. in Crores	Recurring Cost, Rs. in Crores
16.	Implementation of Watershed Development Plan	1.22	--
	Total	**2510.95**	**50.11**
i	Cost provisions for addressing the issues raised in Environmental Public Hearing as per timebound a ction plan	49.4	--

5. Revised Action Plan for Watershed and Hydrogeology Study

Revised Action Plan with respect to recommendations of Watershed Development Study

Phase 1: Preparatory Stage

Activity	Timeline	Budget (Rs. Lakhs)	Responsible Agency	Expected Impact
1.1 Institutional Setup and Capacity Building	3 months	5.00	NTPC, District Administrati on, Society for Elimination of Rural Poverty (SERP)	Governance structure e stablishment
Set up Project Manage ment Unit (PMU)				
1.2 Critical Infrastructu re Assessment	2 months	6.00	Technical teams, local engin eers	Infrastructure assessme nt completed
Total		**11.00**		
- Survey and map canal blockages in Sri Ram Sagar Project (SRSP) system				
- Assess farm wells for rejuvenation, identification of check dams, gully plugging sites, farm bunding and contour b unding sites and well rejuvenation sites.				
- Identify critical erosion sites				
- Conduct structural assessment of drainage channels				

Phase 2: Water Conservation and Management (6-36 months)

Activity	No. of Structures/ Area	Unit Rate (in Rs.)	Budget (Rs. Lakhs)
Check Dam (Gabion Typ es (4-10m in length and 1-2m wide)	9 No.	70,000/-	6.30
Farm Ponds 20mX20x3m	10 No.	2,50,000/-	25.00
Loose Boulder Structures (3x1x1m)	8 No.	15,000	1.20
Contour Bunding	75 ha	40,000/ha	30.00
Block Plantation/Agro Fo restry	9 ha	30,00,000	30.00

Activity	No. of Structures/ Area	Unit Rate (in Rs.)	Budget (Rs. Lakhs)
Gully Plugging	13		
Farm Well Rejuvenation	3		
Farm Bunding	4 ha		
Canal Cleaning	3 Km		
Pond Rejuvenation	5 Nos.		
Total			**92.50**

Phase 3: Livelihood Enhancement and Community Development (36-48 months)

Activity	Timeline	Budget (Rs. Lakhs)	Expected Impact
3.1 Agricultural Productivity Enhancement	36 months	5.00	Increase in crop productivity
Total		**5.00**	
Promote climate-resilient crop varieties			
Establish demonstration plots for best practices			
Support for organic farming initiatives			

Phase 4: Monitoring and Evaluation (Ongoing)

Activity	Timeline	Budget (Rs. Lakhs)	Frequency
4.1 Environmental Monitoring	Throughout project	9.20	Quarterly reporting
Groundwater monitoring from 10 wells		1.60	Quarterly
Surface water quality testing (10 locations)		1.60	Quarterly
Monitor soil erosion rates (10 locations)		1.00	Periodic
Track biodiversity changes		5.00	Once in five years
4.2 Socio-Economic Impact Assessment	-	5.00	As per policy
Conduct household surveys		-	As per policy
Track changes in agricultural productivity		-	As per policy
Assess improvement in water availability		-	As per policy

Evaluate community participation levels		-	As per policy
Total Phase-4		**14.2**	
Total Budget for Phase 1+2+3+4		**122.70 Lakh**	-

Revised Action Plan with respect to recommendations of Hydrogeology Study

Phase 1: Immediate Actions (0-6 months)

Component	**Activity**	**Quantity**	**Unit Cost in Rs.**	**Total Cost (Rs.)**
Groundwater Quality Monitoring				
Monitoring wells installation	Monitoring wells installation 10 wells (3 up gradient, 5 down gradients, 2 lateral)	10	1,20,000	12,00,000
Laboratory testing (out sourced)	Quarterly testing for 1 year	4 cycles	35,000	1,40,000
Phase I Total				**13,40,000**

Phase 2: Short-term Implementation (6-18 months)

Component	**Activity**	**Quantity**	**Unit Cost in Rs.**	**Total Cost (Rs.)**
2.1 Artificial Recharge Structures				
Recharge wells	Priority locations	10	20,000	2,00,000
Recharge trenches	Development	10	50,000	5,00,000
Existing pond rehabilitation	De-silting	20	50,000	10,00,000
Miscellaneous works		**20**	**55,000**	**11,00,000**
Sub-total 2.1				**28,00,000**
2.2 Green Belt Development				
Land preparation	Clearing, pit, digging, Manuring	3,000 trees	1500	45,00,000
Tree plantation	Local species			
Irrigation & maintenance	3 years maintenance			
Subtotal 2.2				**45,00,000**
Phase 2 Total				**Rs.73,00,000**

Phase 3: Long-term Sustainability (18-60 months)

Component	**Activity**	**Quantity**	**Unit Cost in**	**Total Cost**

			Rs.	**(Rs.)**
Basic monitoring equipment	Automated systems	10 stations	30,000	3,00,000
Data management system	Simple setup	1	50,000	50,000
Administrative costs	3 years	-	-	50,000
Operational costs	3 years	-	2,00,000/year	6,00,000
Phase 3 Total				**Rs.10,00,000**
Total Budget for Phase 1+2+ 3				**Rs.96,40,000/**

6. Revised Action Plan for Solar PV installation: Solar PV capacity has been increased and revised to more than 5 MW capacity. Details of Solar PV capacity installation under existing Phase-I and revised capacity under proposed expansion has been given below:

S. N.	**Location**	**Capacity, kw**	**Status**
1	Rooftop of TG Hall, DM Plant, Switch yard etc. buildings in Phase-I	1253	Implemented
2	Rooftop of TG Hall, DM Plant, Switch yard etc. buildings in Phase-II	1500	To be installed under proposed Phase-II
3	Solar PV installations at various location	2500	
	Total	**5253**	

7. Additional mitigation measures for Monitoring and Control of Air Pollution: Following measures have been envisaged for monitoring and control of Air Pollution:

- High efficiency Electrostatic Precipitator (ESP) to control PM emissions in compliance with MoEF&CC norms
- 275 m high stack for wider dispersion as per MoEF&CC Norms
- Low-NOx burners
- Over Fire Air system
- Dry Fog Dust Suppression
- Dust Suppression Dust Extraction System
- Dust Suppression system like water sprinklers and fog cannons in ash handling areas
- Water Sprinkling on Ash Transportation hauling roads
- Installation of Continuous Emission Monitoring System (CEMS)
- Regular operation & maintenance of equipment ensuring efficient functioning
- Continuous Ambient Air Quality monitoring systems (CAAQMS)
- Dense plantation & greenbelt provision around the plant premises
- Dense plantation towards nearby villages, schools, hospitals etc.
- Carbon Sink Plantation on approx. 55 Ha. Degraded Forest Land in consultation with State Forest Dept.

8. Ash Utilization Plan as per compliance cycle given in Ash Utilization Notification

MoEF&CC Compliance Cycle	**Year**	**Ash Generation (LMT)****	**Backlog ash (LMT)**	**Ash Development (LMT)**	**Outside Bricks (in MT)**	**Own Brick Plant (LMT)**	**Cement & Other Industries (LMT)**	**Roads Construction (LMT)**	**Ash Based Products (LMT)**	**Mines filling (LMT)**	**Total Ash Utilized (LMT)**	**Ash Utilization (%)**

	Operation from Existing 2x800MW											
First	FY 2023-24	6.81		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	FY 2024-25	27.36		0.00	3.72	0.89	2.83	0.00	0.03	0.00	7.47	27.30
	FY 2025-26	27.35	4*	0.00	7.35	0.00	14	10.00	0.00	0.00	31.35	112
	FY 2026-27	27.35	4.34*	0.00	6.69	0.00	20.00	5.00	0.00	0.00	31.69	113
	FY 2027-28	27.35	5.00*	0.00	7.35	0.00	20.00	5.00	0.00	0.00	32.35	118
Second	FY 2028-29	27.35		0.00	7.35	0.00	20.00	0.00	0.00	0.00	27.35	100.00
	With commissioning of Phase-II (Unit-I) in 2029: Operation from 2x800MW + 1x800MW											
	FY 2029-30	41.02		0.00	8.00	0.50	23.00	4.52	0.00	0.00	36.02	87.81
	With commissioning of Phase-II (Unit-II) in 2030: Operation from 2x800MW + 2x800MW											
	FY 2030-31	54.70		0.00	13.00	1.67	32.00	13.03	0.00	0.00	59.70	109.14
Third	**With commissioning of Phase-II (Unit-III) in 2031: Operation from 2x800MW + 3x800MW**											
	FY 2031-32	68.37		0.00	12.00	0.83	35.00	20.54	0.00	0.00	68.37	100.00
	FY 2032-33	68.37		0.00	13.00	0.83	40.00	14.54	0.00	0.00	68.37	100.00
	FY 2033-34	68.37		0.00	14.00	0.83	45.00	8.54	0.00	0.00	68.37	100.00

***Quantity of 13.22 LMT of pond ash is non excavatable considering dyke safety and stability,**
**** Ash generation is calculated considering 80% PLF and 40% ash in coal**

§ The above data is tentative and the actual ash generation as well as utilization shall depend upon a number of factors such as PLF, ash content of coal, demand of ash etc.

§ Unutilized Ash at the end of 2024-25 has been envisaged to be utilized in FY 2025-26 & 2027-28 as indicated above.

3.1.3. Deliberations by the committee in previous meetings

N/A

3.1.4. Deliberations by the EAC in current meetings

Observation and deliberation of the EAC

28.7.20: The Committee observed and noted the following:

i. The instant proposal is for seeking Environment clearance for Expansion of Telangana Super Thermal Power Project by adding 3x800MW (Phase II) in existing 2x800MW (Phase I) by M/s NTPC Limited.

ii. The existing Phase-I (2x800MW) project was accorded environmental clearance vide lr. No. J-13012/112/2010-IA. II(T) dated 20/01/2016 from the Ministry of Environment and Forest, New Delhi. The Environmental Clearance was amended vide letter dated 06.03.2017, 21.10.2020, & 08.08.2022. Consent to operate (CTO) for the existing Phase-I (2x800MW) Units was accorded by Telangana State Pollution Control Board (TSPCB), Hyderabad vide Consent order no. 20234665654 dated 16.08.2023. The validity of CTO is up to 31.12.2028. Both the existing units have been commissioned and are under Commercial Operation.

iii. Installation of flue gas desulfurization (FGD) Plant has been commissioned and is operational for Phase-I (Unit-I&II). Commercial Operation Declaration (COD) declared on 15.09.2024 & 30.09.2024 respectively. NTPC Vidyut Vyapar Nigam Limited (NVVN) is selling gypsum produced as a byproduct of FGD processes to cement industries through e-auction.

iv. Installation of 275m high stacks shall be envisaged for the proposed expansion project in compliance to the notification G.S.R 465 (E) dated 11/07/2025 related to FGD.

v. Out of total project area of 738.5503 Ha, 491.6923 Ha area is under possession and 246.8580 Ha area is proposed to be acquired for which Preliminary notification dated 05-09-2024 and demand letter dated 10.09.2024 has been issued by the Revenue Dept.

vi. The EAC also took into consideration the drone survey of the project site and KML file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH portal.

vii. There are no ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. within the study area of 10 km distance from the project site as ascertained from DSS.

viii. There is no Forest Land involved in the existing Phase-I and proposed Phase-II expansion Project. There are Reserve Forest and Protected Forest within 10 km distance from the project site as ascertained from DSS. PP has obtained a Certificate from Forest department, Govt. of Telangana vide letter no. no. 821/S4/ 2024(i) dated 29.03.2025 regarding distance from nearest protected area.

ix. The project site is not located within the Critically Polluted Area (CPA) / Severally Polluted Area (SPA) as per CEPI assessment 2018 of CPCB.

x. The Status of compliance of earlier EC was obtained from MoEF&CC Sub-Office, Hyderabad vide letter no. 1-53/2024/SO-HYD dated 31.12.2024. The Action taken report regarding the partially/non-complied conditions has been submitted to Sub-Office, MoEF&CC-Hyderabad, Telangana vide letter dated 06.02.2025. The report has been deliberated by the committee and found it satisfactory.

xi. The ToR for the proposed Phase-II project was accorded on 10.04.2024 with a validity up to 09.04.2028. Public consultation was done in the presence of Collector & District Magistrate, Pedaapalli, Telangana. An amount of Rs. 49.4 Cr has been allocated to address the public needs highlighted during the public hearing held on 28.01.2025 for Phase-II project.

xii. The water requirement for the proposed Phase-II project is estimated as 56,520 m3/day, which will be obtained from Sreepada Yellampali Barrage on Godavari River. The permission for drawl of 2.73 TMC (~2,11,794 m3/day) surface water is obtained from Irrigation and CAD Dept. Govt of Telangana, vide letter no- G.O.Ms.No.147, dated 09.10.2015. The water will be transported to the plant site through pipeline. The Specific water consumption for the power plant is less than 3.0 m3/MWhr.

xiii. Existing power requirement of 92MW is obtained from Telangana STPP Phase-I. The power requirement for the proposed project is estimated as 162 MW, which will be obtained from the own generation.

xiv. Existing capital cost of project was Rs.13,708.00 Crores. The capital cost of the proposed project is Rs.27,683.29 Crores and the capital cost for environmental protection measures is proposed as Rs. 2,510.95 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 50.11 Crores.

xv. Existing green belt has been developed in 125.95 ha area which is about 29.72 % of the total plant area of 423.717 ha with total sapling of 3.10 lakh Trees. Proposed greenbelt will be developed in 66.03 ha which is about 15.5 % of the total plant area of 423.717 ha. Thus, total of 191.968 ha area (45.3% of total plant area 423.717ha) will be developed as greenbelt. A 5 m - 50 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 2,67,200 saplings will be planted and nurtured in 66 hectares in 6-7 years.

xvi. As per the revised categorization given in the Wildlife (Protection) Amendment Act, 2022, total 18 Schedule I Species found in the study area. A wildlife Conservation Plan with budgetary provision of Rs.2.92 Crores has been prepared for Sch.-I species and it has been approved by Principal Chief Conservator of Forests (PCCF) vide letter ref. WL-1/WL07/32/2024-WLS dated 26.03.2025..

xvii. Godavari River is located at 4.24 km from the project boundary. As per the Irrigation and CAD Dept. letter dated 06/02/2025, the observed maximum HFL of River Godavari is 139 m at Mancherial gauge station on 14.07.2022. The approx. distance of project site from HFL is 4 Km.

xviii. Coal requirement for the proposed project is estimated to be 11.7 MTPA at corresponding 90% PLF considering GCV of 3800 Kcal/Kg.

xix. The Fly Ash will be collected in dry form in silos for further utilization/transportation through rail wagons / closed

trucks to adjacent Cement Plants. 100% Ash will be utilised in Cement Industries, reclamation of abandoned mines, manufacturing of bricks, road construction, and aggregate replacement in concrete, etc. as per Fly Ash Notification, 31st December'2021. Provision will be made for disposal of un-utilized ash in high concentration slurry form to ash dyke.
xx. Baseline data were collected during March to May 2024. The Committee deliberated on the baseline data and incremental GLC due to the proposed project. The committee noted that the proponent is providing high efficiency Electrostatic Precipitator (ESP), Low Nox Burner, Dust Suppression System to control the emission of Particulate matter and NOx and also stack with a height of 275 m will be provided to control & regulate the air emission from the proposed project.
xxi. The committee noted that with respect to water pollution control, proponent shall use Sewage treatment plant and treated sewage water shall be utilized for horticulture purpose. Effluent will be treated in ETP. There will be no effluent discharge from the premises, hence the ZLD will be maintained. A state-of-the-art roof top rain water harvesting system will be provided to collect the run -off for ground water recharging.
xxii. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components.
xxiii. EAC deliberated that the budget provision for hydrogeology study and watershed management plan is not adequate. PP was asked to submit the revised budget provision for the same. Accordingly, PP submitted the revised action plan of Hydrogeology study and watershed management plan. Committee deliberated on the revised action plan of Hydrogeology study/watershed management plan and found it satisfactory.
xxiv. EAC also suggested to install additional solar panel and increase the Solar capacity up to 5 MW. PP submitted the revised Action Plan for Solar photovoltaic (PV) installation which has been increased and revised to more than 5 MW capacity. Committee deliberated on the revised Action Plan for Solar photovoltaic (PV) installation found it satisfactory.
xxv. EAC noted that PP has calculated the 33% green belt plantation in 423.717 ha land which include plant site and ash dyke area. EAC suggested to reduce the proposed ash disposal area and increase the green belt provision. EAC also suggested for plantation in nearby ETP area.
xxvi. EAC observed that the PM10 predicted value was on higher (90 ug/m3) in study area. PP was directed to install high efficiency ESP along with additional control measures to reduce the particulate matter in ambient air.
xxvii. PP needs to explore advance technology for dry ash handling system and new avenues of ash utilization to reduce the area of ash pond.
xxviii. EAC suggested for deepening of the ash pond to reduce the ash pond area upto 120 ha. In line with the same, optimization of area for proposed ash dyke under Telangana STPP Phase-II has been considered reducing the original proposed area from 246.858 ha to 120 ha.
xxix. PP needs to estimate the total green house gas emission and percentage of its sequestration in the proposed plant. PP has to adopt additional measures to reduce the stack emission to cure the air pollution.
xxx. There are 04 CAAQMS are installed in the Telangana STPP project. PP needs to establish one additional CAAQMS in the ash pond area.
xxxi. PP was asked to explore the use of nearby Municipal Corporation STP treated water.
xxxii. There are 10 show cause notices issued by TSPCB for non-adherence to the NOx norms. Proponent has taken necessary action to achieve the prescribed emission norms.
xxxiii. The EAC also deliberated on the written submissions of the project proponent and found it satisfactory.
xxxiv. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
Recommendations of the Committee:
28.7.21: In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 **subject to uploading of written submission on PARIVESH Portal** and stipulation of the following specific conditions and general conditions based on project specific requirements:

3.1.5. Recommendation of EAC

Recommended (Subject to submission of requisite information/ documents)

3.1.6. Details of Environment Conditions

3.1.6.1. Specific

[A] Environmental Management

1.	Project proponent shall ensure that 100% utilization of ash generated from phase II(3x800MW) in accordance with the ash utilization notification dated 31/12/2021 and its subsequent amendments. Area for the additional ash pond proposed for phase II (3x800 MW) shall not exceed 120 Ha as committed.
2.	In addition to the existing 4 Continuous Ambient Air Quality Monitoring Stations (CAAQMS), Project proponent shall install additional one continuous ambient air quality monitoring at suitable locations (preferably near proposed ash dyke area) in consultation with TGPCB within six months from the date of grant of EC as committed.
3.	Project proponent shall comply with the recommendations made in the Watershed development and Hydrogeology study in a time bound manner. Compliance status in this regard shall be submitted to the Regional Office of MoEF&CC along with the six-monthly compliance report.
4.	The water requirement for phase II is estimated as 56,520 m3/day and the same shall be met from Sreepada Yellampali Barrage on Godavari River. The specific water consumption for phase II (3x800MW) shall be less than 3.0 m3/MWhr.
5.	The entire coal requirement for phase I(2x800MW) and phase II(3x800MW) shall be transported by Rail network only and no road transportation is permitted.
6.	Project proponent shall store harvested rainwater in the project boundary and utilize the same for plantation, recharging water in the pond and domestic utilization in colonies. A record shall be maintained of water collected through rainwater and its supply system. PP shall get the water audit done every year to optimize the water requirement.
7.	Project proponent shall implement the protective measure proposed in EMP in a time-bound manner. The budget earmarked for the same is Rs. 2,510.95 Crores and should be kept in separate accounts and audited annually. The implementation status along with the amount spent with documentary proof shall be submitted to the concerned Regional Office for the activities carried out during the previous year.
8.	Project proponent shall assess the carbon footprint of the project and develop carbon sink/carbon sequestration resources using modern technologies. The implementation report shall be submitted to the concerned Regional Office of the MoEF&CC.
9.	Project proponent shall ensure that diesel operated vehicles will be switched over to E-Vehicles/CNG/LNG vehicles in a time bound manner, replace the passenger vehicles to E-vehicle in phased manner. Further, for local movement of officials, Contract of Vehicles deployment shall be awarded to Project affected people and all efforts for adopting heavy E-vehicles/CNG/LNG vehicles like Bulkers for ash transportation for short distance subject to availability of such E-vehicle and adequate charging infrastructure in the surrounding area shall be provided. PP shall submit the action taken report to concerned RO with amount spent, photographs (before & after), number of such non diesel vehicles deployed etc. in six monthly compliance report.
10.	Project proponent shall take all necessary steps to control the Air Quality and take additional mitigation measures for proposed TPP to maintain the Ambient Air Quality values within the NAAQS norms.
11.	Project proponent shall ensure that pipelines carrying the fly ash and effluent shall be inspected regularly for any leakages.
12.	Effluent of 32040 KLD will be treated through Effluent Treatment Plant (ETP). As committed by the Project proponent, zero liquid discharge shall be adopted for the existing and the proposed plant. No wastewater will be discharged outside the project site.
13.	PP shall implement the concurrent plantation plan in a time bound manner. Total of 191.968 ha area (45.32% of total plant area of 423.717ha) will be developed as greenbelt. A 5 m - 50 m wide (min 25 m) greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines within 3 years. PP should annually submit the audited statement of expenditure along with proof of activities viz. geo-tagged photographs (before & after with date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC

	and on PARIVESH Portal as the case may be for the activities carried out during previous year.
14.	Project proponent shall carry out community plantation with incentive scheme by distributing 50,000 saplings per year for a period of five years. Further, PP shall provide basic facilities to the nearby schools such as drinking water, sanitation facilities (sanitary napkin vending machines) and shall also develop green belt around the nearby schools. Further, PP shall organize quarterly awareness programs for school students to educate them on the significance and preservation of trees.
15.	Wildlife conservation plan as approved by the competent authority shall be implemented. Additional, budget shall be added in the plan, in case additional measures suggested by state wildlife department. The final Wildlife conservation plan duly approved by the CWLW shall be submitted to RO, MoEF&CC within a time frame of three months from the date of grant of EC and the budget approved by the concerned authority shall be deposited in a government account.
16.	Project proponent shall install LED display of air quality (Continuous AAQ monitoring) and stack emission (Continuous emission monitoring) at prominent locations preferably outside the plant's main entrance for public viewing and in administrative complex and maintenance of devices shall be done regularly.
17.	Project proponent shall carry out Water Sprinkling on roads inside the plant area/ administrative/ residential areas and outside the plant area at least for 2 KM on a regular basis to control the air pollution. A logbook shall be maintained for the activity and be in six-monthly compliance report.
18.	PP shall deploy vacuum based vehicle for everyday cleaning of the road in and around plant site at least for 5 KM.
19.	Environment Audit of plant shall be done annually, and report shall be submitted to Regional office of the Ministry.
20.	A detailed action plan regarding leachate handling shall be prepared and implemented in consultation with SPCB and the same shall be submitted to the Regional Office of the Ministry. Leachate shall be treated and reused. No treated leachate shall be discharged in any circumstances. Characteristics of Leachate and the treated leachate shall be monitored once in quarter and records shall be maintained.
21.	Oil and grease recovered from the treatment plant should be disposed only through authorized recyclers.
22.	Monitoring of surface water quality and Ground Water quality shall also be regularly conducted in and around the project site and records to be maintained. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall also be undertaken and results/findings submitted along with half yearly monitoring report. The monitored data shall be submitted regularly on PARIVESH portal as part of Half Yearly compliance report.
23.	For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
24.	PP shall ensure that all types of plastic waste generated from the plant shall be stored separately in isolated area and disposed of strictly adhering to the Plastic Waste Management Rules 2016 (as amended). In pursuant to the Ministry’s OM dated 18/07/2022. PP shall also create awareness among the people working in the project area as well as in its surrounding area on the ban on Single Use Plastic (SUP) in order to ensure compliance of Ministry’s Notification published by the Ministry on 12/08/2021. A report along with photograph on the measures taken shall also be included in the six-monthly compliance report submitted by PP.
25.	PP shall install additional solar panel and increase the Solar capacity up to 5 MW as committed.
26.	PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than green belt development. The action in this regard shall be submitted concerned RO in six monthly

	reports.
[B] Socio-economic	
1.	A vision document comprising prospective plan for implementation of various CER activities, plantation programme outside the project cover area, rejuvenation, and conservation of water bodies within 5 km radius of the project cover area shall be prepared and submitted to the Regional Office of the Ministry within 6 months. Implementation status of the same shall be reported to the regional office in 6 monthly compliance report.
2.	Epidemiological Study among population within 5 km radius of project cover area shall be carried out on regular interval (Once in two year) through independent agency. Necessary measures shall be taken as per findings of study in consultation with district administration. Action taken report shall be submitted to the Regional Office of the Ministry.
3.	The budget proposed for PH is Rs. 49.4 Crores. The budget proposed shall be kept in a separate account and audited annually. Project proponent shall implement the action plan to address the issues raised during public hearing within a time frame of 3 years from the date of grant of EC. In addition to this, PP shall strengthen the existing Primary Health Center (PHC) & Community Health Center (CHC) in the study area for better public health as committed. Compliance status in this regard shall be submitted along with the six-monthly compliance to the concerned Regional Office of MoEF&CC.
4.	The establishment of a robust public grievance redressal mechanism to address concerns and complaints from local communities regarding the power plant's operations, environmental impacts, or social issues shall be developed. A Senior Officer shall review the functioning of the mechanism twice in a month.
[C] Miscellaneous	
1.	An Environmental Cell headed by the Environment Manager with postgraduate qualification in environmental science/environmental engineering, shall be created. It shall be ensured that the Head of the Cell shall directly report to the Head of the Plant who would be accountable for implementation of environmental regulations and social impact improvement/mitigation measures.
2.	Consent for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
3.	All necessary clearance from the concerned Authority, as may be applicable should be obtained prior to commencement of project or activity.

3.1.6.2. Standard

1(d)	**Thermal Power Plants**
Statutory compliance	
1.	Emission Standards for Thermal Power Plants as per Ministry’s Notification S.O. 3305(E) dated 7.12.2015, G.S.R.593(E) dated 28.6.2018 and as amended from time to time shall be complied.
2.	Part C of Schedule II of Municipal Solid Wastes Rules, 2016 dated 08.04.2016 as amended from time to time shall be complied for power plants based on Municipal Solid Waste.
3.	MoEF&CC Notifications on Water Consumption vide Notification No. S.O. 3305 (E) dated 07.12.2015 read with G.S.R 593 (E) dated 28.6.2018 as amended from time to time shall be complied
4.	The recommendation from Standing Committee of NBWL under the Wildlife (Protection) Act, 1972 should be obtained, if applicable.

5.	No Objection Certificate from Ministry of Civil Aviation be obtained for installation of requisite chimney height and its siting criteria for height clearance.
Ash content/mode of transporatation of coal	
1.	MoEF&CC Notification issued vide S.O. 1561 (E) dated 21.05.2020 and as amended from time to time shall be complied which inter-alia include use of coal by Thermal Power Plants, without stipulations as regards ash content or distance, shall be permitted subject to compliance of conditions prescribed under (1) Setting Up Technology Solution for emission norms, (2) Management of Ash Ponds and (3) Transportation.
Air quality monitoring and Management	
1.	Project proponent shall abide by the provisions of the notification number G.S.R 465(E) dated 11/07/2025 related to FGD.
2.	Low NOX Burners with Over Fire Air (OFA) system shall be installed to achieve NOX emission standard of 100 mg/Nm3.
3.	High efficiency Electrostatic Precipitators (ESPs) shall be installed in each unit to ensure that particulate matter (PM) emission to meet the stipulated standards of 30 mg/Nm3.
4.	Stack with a height of 275 meters shall be provided with continuous online monitoring instruments for SO2, Nox and Particulate Matter as per extant rules.
5.	Exit velocity of flue gases shall not be less than 20-25 m/s. Mercury emissions from stack shall also be monitored periodically.
6.	Continuous Ambient Air Quality monitoring system shall be set up to monitor common/criteria pollutants from the flue gases such as PM10, PM2.5, SO2, NOXwithin the plant area at least at one location. The monitoring of other locations (at least three locations outside the plant area covering upwind and downwind directions at an angle of 120° each) shall be carried out manually.
7.	Adequate dust extraction/suppression system shall be installed in coal handling, ash handling areas and material transfer points to control fugitive emissions.
8.	Appropriate Air Pollution Control measures (DEs/DSs) be provided at all the dust generating sources including sufficient water sprinkling arrangements at various locations viz., roads, excavation sites, crusher plants, transfer points, loading and unloading areas, etc.
Noise pollution and its control measures	
1.	The Ambient Noise levels shall meet the standards prescribed as per the Noise Pollution (Regulation and Control) Rules, 2000.
2.	Persons exposed to high noise generating equipment shall use Personal Protective Equipment (PPE) like earplugs/ear muffs, etc.
3.	Periodical medical examination on hearing loss shall be carried out for all the workers and maintain audiometric record and for treatment of any hearing loss including rotating to non-noisy/less noisy areas.
Human Health Environment	
1.	Bi-annual Health check-up of all the workers is to be conducted. The study shall take into account of chronic exposure to noise which may lead to adverse effects like increase in heart rate and blood pressure, hypertension and peripheral vasoconstriction and thus increased peripheral vascular resistance. Similarly, the study shall also assess the health impacts due to air polluting agents.

2.	Impact of operation of power plant on agricultural crops, large water bodies (as applicable) once in two years by engaging an institute of repute. The study shall also include impact due to heavy metals associated with emission from power plant.
Water quality monitoring and Management	
1.	Induced/Natural draft closed cycle wet cooling system including cooling towers shall be set up with minimum Cycles of Concentration (COC) of 5.0 or above for power plants using fresh water to achieve specific water consumption of 3.0 m3/MWhr.
2.	In case of the water withdrawal from river, a minimum flow 15% of the average flow of 120 consecutive leanest days should be maintained for environmental flow whichever is higher, to be released during the lean season after water withdrawal for proposed power plant.
3.	Records pertaining to measurements of daily water withdrawal and river flows (obtained from Irrigation Department/Water Resources Department) immediately upstream and downstream of withdrawal site shall be maintained.
4.	Regular (at least once in six months) monitoring of groundwater quality in and around the ash pond area including presence of heavy metals (Hg, Cr, As, Pb, etc.) shall be carried out as per CPCB guidelines. Surface water quality monitoring shall be undertaken for major surface water bodies as per the EMP. The data so obtained should be compared with the baseline data so as to ensure that the groundwater and surface water quality is not adversely impacted due to the project & its activities.
5.	The treated effluents emanating from the different processes such as DM plant, boiler blow down, ash pond/dyke, sewage, etc. conforming to the prescribed standards shall be re-circulated and reused. Sludge/ rejects will be disposed in accordance with the Hazardous Waste Management Rules.
6.	Hot water dispensed from the condenser should be adequately cooled to ensure the temperature of the released surface water is not more than 5 degrees Celsius above the temperature of the intake water.
7.	Wastewater generation of 32040 KLD from various sources (viz. cooling tower blowdown, boiler blow down, wastewater from ash handling, etc) shall be treated to meet the standards of pH: 6.5-8.5; Total Suspended Solids: 100 mg/l; Oil & Grease: 20 mg/l; Copper: 1 mg/l; Iron:1 mg/l; Free Chlorine: 0.5; Zinc: 1.0 mg/l; Total Chromium: 0.2 mg/l; Phosphate: 5.0 mg/l.
8.	Sewage generation of 576 KLD will be treated by setting up Sewage Treatment plant to maintain the treated sewage characteristics of pH: 6.5-9.0; Bio-Chemical Oxygen Demand (BOD): 30 mg/l; Total Suspended Solids: 100 mg/l; Fecal Coliforms (Most Probable Number).
9.	Action plan by the TPPs located within 50 km of a municipality or any Urban Local Body (ULB) to use the treated sewage water produced by the municipality/Urban Local Body(ULB) to reduce fresh water consumption shall be submitted.
Risk Mitigation and Disaster Management	
1.	Adequate safety measures and environmental safeguards shall be provided in the plant area to control spontaneous fires in coal yard, especially during dry and humid season.
2.	Storage facilities for auxiliary liquid fuel such as LDO and HFO/LSHS shall be made as per the extant rules in the plant area in accordance with the directives of Petroleum & Explosives Safety Organisation (PESO). Sulphur Content in the liquid fuel should not exceed 0.5%.
3.	Ergonomic working conditions with First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
4.	Safety management plan based on Risk Assessment shall be prepared to limit the risk exposure to the workers

	within the plant boundary.
5.	Regular mock drills for on-site emergency management plan and Integrated Emergency Response System shall be developed for all kind of possible disaster situations.
Green belt and Biodiversity conservation	
1.	Green belt shall be developed in an area of 33% of the total project with indigenous native tree species in accordance with CPCB guidelines. The green belt shall inter-alia cover an entire periphery of the plant.
2.	In-situ/ex-situ Conservation Plan for the conservation of flora and fauna should be prepared and implemented.
Waste management	
1.	Solid waste management should be planned in accordance with extant Solid Waste Management Rules, 2016.
2.	Toxicity Characteristic Leachate Procedure (TCLP) test shall be conducted for any substance, potential of leaching heavy metals into the surrounding areas as well as into the groundwater.
3.	Ash pond shall be lined with impervious liner as per the soil conditions. Adequate dam/dyke safety measures shall also be implemented to protect the ash dyke from getting breached.
4.	Fly ash shall be collected in dry form and ash generated shall be used in phased manner as per provisions of the Notification on Ash Utilization issued by the Ministry S.O. 5481 dated 31.12.2021, S.O.6169 (E) dated 30.12.2021, S.O.05 (E) dated 01.01.2024 and amendment thereto.
5.	Unutilized ash if any shall be disposed off in the ash pond in the form of High Concentration Slurry method.
Monitoring of compliance	
1.	Environmental Audit of the project be taken up by the third party for preparation of Environmental Statement as per Form-V & Conditions stipulated in the EC and report be submitted to the Ministry.
2.	Resettlement & Rehabilitation Plan as per the extant rules of Govt. of India and respective State Govt. shall be followed, if applicable.
3.	Energy Conservation Plan to be implemented as envisaged in the EIA / EMP report. Renewable Energy Purchase Obligation as set by MoP/State Government shall be met either by establishing renewable energy power plant (such as solar, wind, etc.) or by purchasing Renewable Energy Certificates.
4.	Energy and Water Audit shall be conducted at least once in two years and recommendations arising out of the Report should be followed. A report in this regard shall be submitted to Ministry's Regional Office.
5.	The project proponent shall (Post-EC Monitoring): a. send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government; b. upload the clearance letter on the web site of the company as a part of information to the general public. c. inform the public through advertisement within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forest and Climate Change (MoEF&CC) at http://parviesh.nic.in. d. upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same periodically; e. monitor the criteria pollutants level namely; PM (PM10& PM2.5incase of ambient AAQ), SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company;

	f. submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB; g. submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company; h. inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project and the date of commencement of the land development work.
Corporate Environmental Responsibility (CER) activities	
1.	CER activities will be carried out as per Ministry's OM F.No.22- 65/2017- IA.III dated 30th September, 2020 and 22-65/2017- IA.III dated 25.02.2021 or as proposed by the PP in reference to Public Hearing or as earmarked in the EIA/EMP report along with the detailed scheduled of implementation with appropriate budgeting.

3.2. Agenda Item No 2:

3.2.1. Details of the proposal

Proposed 4x800 MW Coal Based Ultra Super Critical Thermal Power Plant (USCTPP) at Villages Chhatai, Maj htoliya & Umarda, Tehsil Kotma, District Anuppur, Madhya Pradesh by ANUPPUR THERMAL ENERGY (M P) PRIVATE LIMITED by **Adani Power Limited** located at **ANUPPUR,MADHYA PRADESH**

Proposal For		Fresh EC	
Proposal No	**File No**	**Submission Date**	**Activity (Schedule Item)**
IA/MP/THE/543505/2025	J-13012/144/2010-IA-II(T)	19/07/2025	Thermal Power Plants (1(d))

3.2.2. Project Salient Features

Agenda No. 28.8

28.8 Proposed 4x800 MW Coal Based Ultra Super Critical Thermal Power Plant (USCTPP) **by M/s Anuppur Thermal Energy (MP) Private Limited** located at Villages Chhatai, Majhtoliya & Umarda, Tehsil Kotma, **District Anuppur**, **Madhya Pradesh - Environmental Clearance-regarding.**

[Proposal No. IA/MP/THE/543505/2025; F.No. J-13012/144/2010-IA-II(T)]

28.8.1: M/s. Anuppur Thermal Energy (MP) Private Ltd., a subsidiary of Adani Power Limited, has made an online application vide proposal no. IA/MP/THE/543505/2025 dated 12.07.2025 along with copy of EIA/EMP report, Form seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at item no. 1(d) Under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level. The project do not attract the provisions of general condition of the EIA Notification, 2006.

Name of the EIA consultant: M/s Gaurang Environmental Solutions Pvt. Ltd. Certificate No. NABET/EIA/2326/RA 0338 Valid up to: 07.12.2026.

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

28.8.2: The Project Site for instant proposal was earlier accorded Environmental Clearance (EC) was granted by the MoEF&CC, New Delhi vide File no. J 13012/144/2010-IA. II (T) dated 27.11.2012 to M/s Welspun Energy Anuppur Pvt. Ltd. for 1320 (2x660) MW Thermal Power Plant. Subsequently, M/s Welspun Energy Anuppur Pvt. Ltd. had obtained Consent to Establish (CTE) from Madhya Pradesh Pollution Control Board (MPPCB) vide letter dated 18.07.2013. Further, the MoEF&CC issued Transfer of Environmental Clearance to Anuppur Thermal Energy (MP) Private Ltd (ATEMPPL) & validity extension up to 26.11.2022, New Delhi vide letter No. F. No: J-13012/144/2010-IA. II(T) dated 07.01.2020. There is no activity undertaken at the site except the boundary wall construction. The validity of the EC lapsed on 26/11/2023. Now the configuration has changed from 2x660 MW to 4x800 MW in an area of 371 and

de-novo EC process has been initiated.

28.8.3: The project of M/s Anuppur Thermal Energy (MP) Private Ltd located at Village Chhatai, Majhtoliya and Umarda, Tehsil Kotma, District Anuppur, Madhya Pradesh, is for setting up a new power plant with a capacity of 4x800 MW (Coal Based Ultra-Super Critical Technology).

28.8.4: Status of installation of Flue Gas Desulphurization shall be furnished as per the MoEF&CC Notification dated 11/07/2025:

28.8.5: The detail of the ToR is furnished as below:

Proposal No with date	Consideration	Details	Date of ac cord	ToR V alidity
IA/MP/THE/495356/2024 Dated – 19.09.2024	13th meeting of EA C held on 01.10.202 4	**Terms of Re ference**	**28.10.2024**	**30.10.2028**

28.8.6: Environmental site settings

S. No.	Particulars	Details		Remarks	
1.	Total land	371 ha [Private: 312 ha; Govt.:- 59 ha; Agriculture --Nil;]		Land use: Industrial (The land is in poss ession of company & is barren)	
2.	Land use break up	**Facilities**	**Total Area (In Hectares)**	--	
		Main Plant	85		
		Coal Handling Sys tem	73		
		Water System	30		
		Switch Yard	NIL*		
		Green belt	123		
		Roads	NIL*		
		Township	13		
		Ash pond	47		
		Railway Siding	Not envisaged. Wagon Tippler/ Track hopper facility will be pr ovided within the Plant		
		Water Supply Pipelin e	Water Source from Sone River, about 46.2 Km from Plant bound ary		
		Ash Transport Pipelin e	NIL*		
		Others	---		

<table>
<tr><td>S. No.</td><td>Particulars</td><td colspan="2">Details</td><td>Remarks</td><td></td></tr>
<tr><td></td><td></td><td>Total</td><td>371 Ha.</td><td></td><td></td></tr>
<tr><td></td><td></td><td colspan="2">*Included in Main Plant Area</td><td></td><td></td></tr>
<tr><td>3.</td><td>Land acquisition details as per MoEF&CC O.M, dated 7/10/2014</td><td colspan="2">The land is already in possession with Anuppur TPP.</td><td>Land Documents are submitted along with EC application.</td><td></td></tr>
<tr><td>4.</td><td>Existence of habitation & involvement of R&R, if any.</td><td colspan="2"><u>Project site</u>: Name of village (if any): No R&R.
Study Area: As Below
<table>
<tr><th>Habitation / vilage</th><th>Distance (Km)</th><th>Direction</th></tr>
<tr><td>Umarda</td><td>0.3</td><td>East</td></tr>
<tr><td>Chhatai</td><td>0.3</td><td>North</td></tr>
<tr><td>Majhauli</td><td>0.3</td><td>ESE</td></tr>
<tr><td>Mantolia</td><td>0.5</td><td>East</td></tr>
<tr><td>Tarasilli</td><td>0.5</td><td>South</td></tr>
<tr><td>Gulidand</td><td>1.2</td><td>SW</td></tr>
<tr><td>Kothi</td><td>1.6</td><td>SW</td></tr>
<tr><td>Jaratola</td><td>3.1</td><td>NW</td></tr>
<tr><td>Khamroudh</td><td>3.3</td><td>SW</td></tr>
</table></td><td>R&R Not applicable/ not involved.</td><td></td></tr>
<tr><td>5</td><td>Existence of school and hospital if any.</td><td colspan="2">A. <u>School</u>
Project site: NIL
Study Area: As below
<table>
<tr><th>School</th><th>Distance (Km)</th><th>Direction</th></tr>
<tr><td>Government Middle School, Gulidand</td><td>1.2</td><td>S</td></tr>
<tr><td>Government Higher Secondary School, Kothi</td><td>1.28</td><td>SE</td></tr>
</table>
B. <u>Hospital</u>
Project site: NIL
Study Area: As below
<table>
<tr><th>School</th><th>Distance (Km)</th><th>Direction</th></tr>
<tr><td>Primary Hospital Kothi</td><td>1.90</td><td>S</td></tr>
<tr><td>Community Health Centre, Kothi</td><td>3.39</td><td>S</td></tr>
</table></td><td></td><td></td></tr>
<tr><td>6.</td><td>Latitude and Longitude of <u>all corners</u> of the project site.</td><td colspan="2">A. Plant site
<table>
<tr><th>S. No.</th><th>Latitude</th><th>Longitude</th><th>S. No.</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td></td><td>23°22'19.89"N</td><td>82° 1'53.98"E</td><td></td><td>23°21'19.89"N</td><td>82° 2'56.84"E</td></tr>
<tr><td></td><td>23°22'18.06"N</td><td>82° 2'0.52"E</td><td></td><td>23°21'20.21"N</td><td>82° 2'55.86"E</td></tr>
<tr><td></td><td>23°22'12.97"N</td><td>82° 2'0.45"E</td><td></td><td>23°21'19.94"N</td><td>82° 2'55.24"E</td></tr>
<tr><td></td><td>23°22'13.67"N</td><td>82° 2'4.48"E</td><td></td><td>23°21'20.16"N</td><td>82° 2'53.46"E</td></tr>
<tr><td></td><td>23°22'8.45"N</td><td>82° 2'12.47"E</td><td></td><td>23°21'21.78"N</td><td>82° 2'49.36"E</td></tr>
<tr><td></td><td>23°22'4.50"N</td><td>82° 2'17.58"E</td><td></td><td>23°21'20.28"N</td><td>82° 2'46.78"E</td></tr>
</table></td><td></td><td></td></tr>
</table>

S. No.	Particulars	Details	Remarks

	23°22'8.82"N	82° 2'20.22"E		23°21'22.93"N	82° 2'46.03"E
	23°22'8.77"N	82° 2'21.31"E		23°21'22.44"N	82° 2'44.66"E
	23°22'5.89"N	82° 2'29.35"E		23°21'24.60"N	82° 2'43.06"E
	23°22'4.47"N	82° 2'36.33"E		23°21'26.67"N	82° 2'44.74"E
	23°22'5.47"N	82° 2'37.69"E		23°21'27.33"N	82° 2'39.68"E
	23°22'5.68"N	82° 2'38.70"E		23°21'29.96"N	82° 2'37.04"E
	23°22'7.07"N	82° 2'38.80"E		23°21'31.14"N	82° 2'33.79"E
	23°22'8.22"N	82° 2'42.45"E		23°21'33.86"N	82° 2'29.44"E
	23°22'12.24"N	82° 2'44.21"E		23°21'35.33"N	82° 2'23.91"E
	23°22'15.22"N	82° 2'48.91"E		23°21'34.04"N	82° 2'17.00"E
	23°22'15.91"N	82° 2'49.28"E		23°21'34.90"N	82° 2'12.77"E
	23°22'15.64"N	82° 2'50.28"E		23°21'40.38"N	82° 2'11.95"E
	23°22'20.34"N	82° 2'52.56"E		23°21'42.33"N	82° 2'7.24"E
	23°22'5.23"N	82° 3'34.52"E		23°21'44.50"N	82° 2'8.44"E
	23°22'3.48"N	82° 3'34.48"E		23°21'45.08"N	82° 2'7.30"E
	23°22'0.29"N	82° 3'32.98"E		23°21'44.16"N	82° 2'6.23"E
	23°21'56.30"N	82° 3'32.35"E		23°21'45.19"N	82° 2'4.18"E
	23°21'55.70"N	82° 3'33.77"E		23°21'48.04"N	82° 2'5.49"E
	23°21'54.47"N	82° 3'33.76"E		23°21'49.00"N	82° 2'4.86"E
	23°21'54.53"N	82° 3'33.15"E		23°21'47.49"N	82° 2'3.08"E
	23°21'51.71"N	82° 3'32.75"E		23°21'49.11"N	82° 2'2.37"E
	23°21'51.61"N	82° 3'31.76"E		23°21'48.80"N	82° 2'1.83"E
	23°21'51.82"N	82° 3'30.40"E		23°21'49.86"N	82° 2'1.59"E
	23°21'49.22"N	82° 3'29.72"E		23°21'53.00"N	82° 1'52.86"E
	23°21'48.72"N	82° 3'30.55"E		23°21'42.58"N	82° 1'48.69"E
	23°21'42.81"N	82° 3'27.66"E		23°21'53.85"N	82° 1'31.53"E
	23°21'40.89"N	82° 3'29.54"E		23°21'55.12"N	82° 1'32.50"E
	23°21'39.63"N	82° 3'28.83"E		23°21'54.15"N	82° 1'36.08"E
	23°21'41.37"N	82° 3'25.84"E		23°21'52.21"N	82° 1'36.17"E
	23°21'38.58"N	82° 3'24.36"E		23°21'48.90"N	82° 1'39.79"E
	23°21'37.44"N	82° 3'27.10"E		23°21'47.74"N	82° 1'41.95"E
	23°21'36.93"N	82° 3'26.95"E		23°21'49.86"N	82° 1'44.35"E
	23°21'36.83"N	82° 3'27.15"E		23°21'51.56"N	82° 1'39.11"E
	23°21'32.43"N	82° 3'26.01"E		23°21'54.19"N	82° 1'39.55"E
	23°21'32.22"N	82° 3'26.80"E		23°21'56.92"N	82° 1'44.14"E
	23°21'31.91"N	82° 3'26.71"E		23°22'0.54"N	82° 1'45.80"E
	23°21'33.07"N	82° 3'22.52"E		23°22'1.50"N	82° 1'43.22"E
	23°21'33.25"N	82° 3'14.24"E		23°22'1.21"N	82° 1'42.99"E
	23°21'31.80"N	82° 3'13.50"E		23°22'4.81"N	82° 1'31.83"E
	23°21'31.88"N	82° 3'13.28"E		23°22'10.46"N	82° 1'35.06"E
	23°21'31.32"N	82° 3'12.93"E		23°22'13.91"N	82° 1'35.80"E
	23°21'31.88"N	82° 3'11.90"E		23°22'13.16"N	82° 1'36.86"E
	23°21'30.46"N	82° 3'10.80"E		23°22'14.27"N	82° 1'37.84"E
	23°21'30.24"N	82° 3'11.27"E		23°22'11.44"N	82° 1'41.35"E
	23°21'28.12"N	82° 3'10.50"E		23°22'14.90"N	82° 1'44.12"E
	23°21'26.05"N	82° 3'13.76"E		23°22'14.29"N	82° 1'45.66"E
	23°21'20.90"N	82° 3'8.64"E		23°22'10.30"N	82° 1'42.41"E
	23°21'20.65"N	82° 3'6.57"E		23°22'8.86"N	82° 1'44.78"E
	23°21'21.91"N	82° 3'1.50"E		23°22'14.37"N	82° 1'47.90"E
	23°21'19.82"N	82° 3'0.83"E		23°22'13.88"N	82° 1'48.76"E
	23°21'20.19"N	82° 2'56.99"E		23°22'17.63"N	82° 1'52.58"E

B. Ash pond

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th><th></th></tr>
<tr><td></td><td></td><td>
<table>
<tr><th>S.NO.</th><th>LATITUDE</th><th>LONGITUDE</th></tr>
<tr><td>1</td><td>23°22'8.01"N</td><td>82° 2'8.31"E</td></tr>
<tr><td>2</td><td>23°21'53.09"N</td><td>82° 1'56.73"E</td></tr>
<tr><td>3</td><td>23°21'54.00"N</td><td>82° 1'51.94"E</td></tr>
<tr><td>4</td><td>23°21'45.12"N</td><td>82° 1'47.54"E</td></tr>
<tr><td>5</td><td>23°21'47.28"N</td><td>82° 1'44.05"E</td></tr>
<tr><td>6</td><td>23°21'49.91"N</td><td>82° 1'46.00"E</td></tr>
<tr><td>7</td><td>23°21'52.79"N</td><td>82° 1'41.60"E</td></tr>
<tr><td>8</td><td>23°22'0.70"N</td><td>82° 1'47.35"E</td></tr>
<tr><td>9</td><td>23°22'6.06"N</td><td>82° 1'34.37"E</td></tr>
<tr><td>10</td><td>23°22'11.83"N</td><td>82° 1'37.48"E</td></tr>
<tr><td>11</td><td>23°22'7.99"N</td><td>82° 1'44.74"E</td></tr>
<tr><td>12</td><td>23°22'17.31"N</td><td>82° 1'54.39"E</td></tr>
<tr><td>13</td><td>23°22'16.74"N</td><td>82° 1'58.26"E</td></tr>
<tr><td>14</td><td>23°22'12.15"N</td><td>82° 1'59.10"E</td></tr>
</table>
</td><td></td><td></td></tr>
<tr><td>7.</td><td>Elevation of the project site</td><td>Average site elevation (AMSL):
TPP: 562 m, Ash Dyke: 565 m</td><td></td><td></td></tr>
<tr><td>8.</td><td>Involvement of Forest land if any.</td><td>Nil</td><td>NOC has been issued for no involvement of forest land by DFO,Forest Division, Anuppur vide letter no. kramank / Ma.Chi. / 2025 / 3242 dated 22.05.2025</td><td></td></tr>
<tr><td>9.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project
site as well as study area</td><td>Study area:
<table>
<tr><th>Particulars</th><th>Distance (in km)</th><th>Direction</th></tr>
<tr><td>Kewai river</td><td>0.07</td><td>W</td></tr>
<tr><td>Koki Nala</td><td>0.75</td><td>W</td></tr>
<tr><td>Barne Nadi</td><td>1.40</td><td>N</td></tr>
<tr><td>Katambar Nadi</td><td>3.70</td><td>ENE</td></tr>
<tr><td>Latura Nala</td><td>4.00</td><td>SSE</td></tr>
<tr><td>Kharla Nala</td><td>6.20</td><td>NNW</td></tr>
<tr><td>Mariyakachhar Nadi</td><td>6.60</td><td>NW</td></tr>
<tr><td>Thadaghat Nala</td><td>7.35</td><td>NE</td></tr>
<tr><td>Chaudhar Nala</td><td>7.60</td><td>WSW</td></tr>
<tr><td>Kanai Nala</td><td>8.20</td><td>S</td></tr>
<tr><td>Jilodhar Nala</td><td>8.90</td><td>NW</td></tr>
<tr><td>Dhodiya Nala</td><td>9.20</td><td>NW</td></tr>
<tr><td>Baniya Nadi</td><td>9.40</td><td>WNW</td></tr>
</table>
*Source: - All distances are taken with respect to S.O.I. To posheet, which is pertinent to this project.
The Kewai River flows at a distance of approximately 70 meters west (as per DSS) of the proposed Anuppur Thermal Power Project site. As required by MoEF&CC O.M. dated 14.02.2022, the HFL certificate from WRD, Anuppur received. HFL of Kewai River is 538.5m (MSL) whereas proposed project Site elevation is 562m (MSL) which is substan</td><td>HFL letter from WRD received. The HFL of Kewai River is 538.50 meters</td><td></td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th><th></th></tr>
<tr><td></td><td></td><td>tially higher elevation.
In compliance with the siting criteria and to ensure the ecol ogical integrity of the river, the project layout has been desi gned outside the HFL influence zone and includes a greenb elt buffer along the riverbank. A detailed river conservation action plan will be adopted, which includes:
• Maintaining a safe setback distance from the river edg e.
• Plantation of native species to stabilize the riverbank.
• Avoiding any discharge or obstruction in the natural f low of the river.
• Regular monitoring of surface water quality.</td><td></td><td></td></tr>
<tr><td>10.</td><td>Existence of ESZ/ESA/ national par k/ wildlife sa nctuary/ bios phere reserv e/ tiger reser ve/ elephant reserve etc. if any within th e study area</td><td><u>Study area</u>
Name of the ESZ/ESA: NA
Status of Notification: NA
Distance of project from ESZ/ESA: NA
Authenticated map of ESZ projecting distance of E SZ from project site: NA
Status of NBWL approval: NA
List of Reserved and protected forests:
<table><tr><th>Particulars</th><th>Distance (In k m)</th><th>Directio n</th></tr><tr><td colspan="3">Reserve Forest (R.F), Protected Forest (P.F)</td></tr><tr><td>Nandlal Patera R. F.</td><td>1.10</td><td>E</td></tr><tr><td>Gundur P. F.</td><td>3.65</td><td>ENE</td></tr><tr><td>Dehuli R.F.</td><td>5.65</td><td>NNE</td></tr><tr><td>Mahora R.F.</td><td>7.6</td><td>WSW</td></tr><tr><td>Rukra R.F.</td><td>7.70</td><td>E</td></tr><tr><td>Kelhari P.F.</td><td>7.90</td><td>N</td></tr></table>No National Park, Sanctuary, Elephant/Tiger Reserve, or migratory routes/wildlife corridor exists within 10 km of the TPP. NOC from Forest Department, Anuppur has bee n obtained vide Letter no. kramank / Ma.Chi. / 2025 / 32 44 dated 22.05.2025 state that the project does not impac t any Wildlife Corridor.</td><td></td><td></td></tr>
<tr><td>11.</td><td>Archaeologic al sites monu ments/ histor ical temples etc.</td><td>There are no Archaeological sites present within study a rea.</td><td></td><td></td></tr>
<tr><td>12.</td><td>Facility envis aged in CRZ area (Only fo r coastal pow er plant)</td><td><u>Name of the facility in CRZ area</u> – NA
<u>Recommendations of CZMA</u> – NA
<u>Status of CRZ clearance – NA</u></td><td></td><td></td></tr>
<tr><td>13.</td><td>Involvement of Critically Polluted Are a/Severely P olluted area a</td><td><u>Involvement of CPA/SPA:</u> - NA
<u>Proximity to CPA/SPA:</u> - NA</td><td>There is no CPA/SP A as per CPCB Inde x.</td><td></td></tr>
</table>

S. No.	Particulars	Details	Remarks
	s per 2018 C EPI score		

28.8.7: The unit configuration and capacity of proposed project is given as below:

Sr. No.	Existing power plant configuration and capacity	Proposed power plant configuration and capacity	Total	Technology adopted
1	**NA**	**(4x800) MW**	**3200 MW**	Ultra Super Critical

28.8.8: The details of the fuel (Coal/LDO) requirement for the proposed project along with its source and mode of transportation is given as below:

Details	Fuel requirement (MTPA)	Source	Distance from site (Kms)	Mode of Transportation	Coal characteristics (Worst case scenario)	Linkage document
Coal	13.3 (85% PLF)	Mara II Mahan Coal Mine, Gondbahera Ujheni, East Coal Mine & E-Auction.	Within 250 Km	Rail	Ash <40 (%) Sulphur <0.5 (%) Moisture-13 (%) GCV - 3700-4300 Kcal/Kg	FSA and E-auction
LDO/ HSD	25000 KL per Annum	Local Market/ Vendors	Approx. 25-30 Km	Road	Low Sulphur (3-5% mass)	Local Vendors

28.8.11: Baseline Environmental Studies

Period	October' 2024 to December 2024			Addition study (if any)
AAQ parameters at 12 Locations (min and max)	**Parameter**	**Min ($\mu g/m^3$)**	**Max ($\mu g/m^3$)**	--
	PM_{10}	37.3	66	
	$PM_{2.5}$	21	50	
	SO_2	2.2	10.7	
	NOx	2.2	11.7	
	CO	0.05	0.45	
Incremental GLC level	PM_{10}= Max. GLC: 0.499 $\mu g/m^3$ at 0.75 km in ESE direction SO_2 = Max GLC: 10.23 $\mu g/m^3$ at 0.75 km in ESE direction NO_x = Max GLC: 3.26 $\mu g/m^3$ at 0.75 km in ESE direction Note:			--
Ground water quality at 20 locations	pH: 6.69 to 7.79, total Hardness (as CaCO3): 122mg/l – 302 mg/l; Chlorides: 56 mg/l – 192 mg/l; Fluoride: BDL (DL-0.1)/mg/l; Heavy metals like Copper (as Cu) - BLQ(LOQ-0.01), Lead (as Pb) - BLQ(LOQ- 0.005), Cadmium (as			--

<table>
<tr><th>Period</th><th>October’ 2024 to December 2024</th><th>Addition stu dy (if any)</th></tr>
<tr><td></td><td>Cd) - BLQ(LOQ-0.001), Chromium (as Cr) - BLQ(LOQ-0.001), Arsenic (as As)- BLQ(LOQ-0.001) and Mercury(as Hg)- BLQ(LOQ-0.001).</td><td></td></tr>
<tr><td>Surface wat er quality at 05 locations</td><td>pH 7.84 to 8.12, Dissolved Oxygen: 6.2 to 6.7 mg/lit; BOD:3-12 mg/L; CO D:18-62 mg/l</td><td>--</td></tr>
<tr><td>Effluent gen eration deta ils and its tr eatment</td><td></td><td>The project is ba sed on Zero Liq uid Discharge (Z LD).</td></tr>
<tr><td>Noise levels Leq (Day and N ight) at 12 l ocations</td><td>The Leq values for day time was observed to be 41.9 to 54.5 dB (A), while dur ing night time 36.6 to 44.1 dB (A).</td><td>--</td></tr>
<tr><td>Traffic asse ssment stud y findings</td><td>•Traffic study has been conducted for one month.
•Traffic study has been conducted at SH-8 and nearby village road which is ap proximately 5 Km (distance) and adjacent to the project site respectively co nnecting the plant site.
•Also, the existing road will be strengthened and thus, the capacity of the roa d will also be enhanced.
Existing level of service (LOS) is A.
<table>
<tr><th>Road</th><th>Volume (in PCU/Day)</th><th>Capacity (i n PCU/Da y)</th><th>Existing V/C Rati o</th><th>LOS</th><th>Performance</th></tr>
<tr><td>SH 8</td><td>569.5</td><td>15000</td><td>0.0379</td><td>A</td><td>Excellent</td></tr>
<tr><td>Village Road</td><td>455.5</td><td>6000</td><td>0.0759</td><td>A</td><td>Excellent</td></tr>
</table>
Modified LoS (after proposed project) is calculated as under:
<table>
<tr><th rowspan="2">Road</th><th rowspan="2">Existing LOS</th><th colspan="4">Changed V/C and LOS after adding generat ed traffic from operational phase of propose d project</th></tr>
<tr><th>Increase d V</th><th>C</th><th>V/C</th><th>Modified LOS</th></tr>
<tr><td>Village road</td><td>A ‘Excellent’</td><td>455.5 + 8 15 = 127 0.5 say 1 271</td><td>15,000</td><td>0.084</td><td>A</td></tr>
<tr><td>S.H. 8</td><td>A ‘Excellent’</td><td>569.5 + 8 15 = 138 4.5 say 1 385</td><td>15,000</td><td>0.092</td><td>A</td></tr>
</table>
•Conclusion: Thus, it can be inferred that LoS of the roads will not change from current LOS and thus, the impact can be considered as marginal</td><td>--</td></tr>
<tr><td>Soil Qualit y at 12 Loc ations</td><td>pH range 7.38 to 7.62; Electrical conductivity (EC); 190 to 240 mhos/cm; Ca lcium: 74 to 126 mg/kg; Sodium:72 to 118.7mg/kg; potassium: 158 to 188 m g/kg; Nitrogen: 10.2 to 13.4 mg/kg; Phosphorous: 11.4 to 13.5 mg/kg; Cat</td><td>--</td></tr>
</table>

<table>
<tr><th>Period</th><th>October’ 2024 to December 2024</th><th>Addition study
(if any)</th></tr>
<tr><td></td><td>ion Exchange Capacity (CEC): 1.3 to 2.4 meg/100gm; Magnesium: 30 to 43 mg/kg; Organic Matter: 0.75% to 0.86 %</td><td></td></tr>
<tr><td>Flora and fauna</td><td>16 Schedule I Species found in the buffer zone during field survey and secondary sources. Of 16 Schedule I Species, 9 are mammals, 4 are avifauna and 3 herpeto-fauna.</td><td>The List of Flora & Fauna is duly certified by DFO, Forest Division,Anuppur vide letter no. kramank / Ma.Chi. / 2025 / 3246 dated 22.05.2025.
Wildlife Conservation Plan has been prepared and submitted for further approval from Forest office.</td></tr>
<tr><td>Hydrogeology study</td><td>The action plan to address the recommendation of the Hydrogeology report and Watershed management plan are as below:
<table>
<tr><th>Sl. NO</th><th>NIT Recommendations</th><th>Action Plan</th></tr>
<tr><td>1</td><td>Since, the maximum TDS value found at WS-6 village was found to be above the acceptable TDS limit, it is recommended to monitor the TDS levels to prevent degradation of groundwater quality and problems due to scaling in the plant's operations.</td><td>Water quality monitoring shall be done once a month, which includes WS-6 village, through NABL accredited laboratory to monitor TDS level.
Also, TPP is based on Zero Liquid Discharge (ZLD).</td></tr>
<tr><td>2</td><td>As the value of total hardness as CaCO3 in WS-7groundwater sample was found to be more than acceptable limit (200 mg/l), it is suggested to ensure regular monitoring and testing of groundwater in order to track any changes hardness levels.</td><td>Ground Water quality monitoring shall be sone once in a month engaging NABL accredited laboratory to track any changes in hardness as $CaCO_3$ content.</td></tr>
<tr><td>3</td><td>Since some groundwater samples (WS-6, 7, 8, 9, 15, and 16) exceed the acceptable sulphate limit of 200 mg/L but remain below the permissible limit of 400 mg/L, it is recommended to implement proper measures for maintenance of water treatment and cooling infrastructure before use, ensuring op</td><td>Anuppur TPP will initiate a routine water quality monitoring program, with monthly sampling and analysis of sulphate and associated parameters through NABL accredited laboratory and corrective/preventive actions will be taken based on findings in the report.
In addition to the above, Anuppur TPP shall be using Surface water and ZLD will be Implemented</td></tr>
</table></td><td>Consultant details:
The hydrogeology study report has been prepared by M/s. Akshar Geo Services Pvt. Ltd & Vetted by NIT Delhi.</td></tr>
</table>

Period	October' 2024 to December 2024	Addition study (if any)
	erational efficiency of the plant.	
Impact study on biodiversity and aquatic ecology	Recommendations of study report:	Indian Institute of Social Welfare and Business Management, University of Calcutta in 2025.
Risk Assessment Study	Project specific risk assessment with respect to storage of LDO & Coal storage and other hazardous chemicals is included in Final EIA-EMP Report. The appropriate preventive measures and necessary safeguards such as toxic and flammable gas detectors, alarm / interlock systems, breathing apparatus for working personnel, fire protection systems such as fire extinguishers, water curtain, fire water hydrants in place, the untoward consequences and the major risk due to the same could be eradicated	Gaurang Environmental Solutions Pvt. Ltd.
Marine Impact Assessment Study	Not Applicable	--

28.8.12: The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal	Remarks
1	Municipal Solid Waste	Plant Canteen	90	Collected;segregated using color coded waste bin, Organic waste converters (OWC)	Inorganic will be disposed via local municipal authorized vendor & Organic/ Biodegradable waste by OWC.	-
2	E-waste	IT & Telecom Equipment	3.5 TPA	Collected; segregated	Registered Recycler vendor	
3	Battery waste from UPS	Automotive & Industrial	7 TPA	Collected; segregated	Authorized Vendor	
4	Bio medical waste	First aid center	0.12 TPA	Collected; segregated	Authorized vendor	
5	Hazardous Waste	Plant Operation	Used/ Spent Oil – 100 TPA, Waste or residues Empty Barrels/	-	Registered Recyclers/Pre-processors with SPCB & Auth	

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal	Remarks
			Containers/ Contaminated Liners – 15 TPA contaminated cotton – 5.0 TPA		orized Recyclers	

28.8.13: Public Consultation:

The public hearing was conducted on 15.05.2025 at Project Site - Anuppur Thermal Energy (MP) Pvt. Ltd. (Project Site), Village Majhauli, Chhatai Road, Post-Kothi, Tehsil Kotma, District-Anuppur (MP)

Details of advertisement given	Raj Express, Jabalpur (Hindi) - 10.04.2025, Dainik Bhaskar, Jabalpur (Hindi)- 11.04.2025, Patrika, Jabalpur (Hindi)- 15.04.2025, & Times of India, Bhopal (English) -10.04.2025
Date of public consultation	15.05.2025 at 12:00 P.M. to 2:00 P.M
Venue	Anuppur Thermal Energy (MP) Pvt. Ltd. (Project Site), Village Majhauli, Chhatai Road, Post-Kothi, Tehsil Kotma, District-Anuppur (MP)
Presiding Officer	Additional Collector and Additional District Magistrate, Anuppur
Major issues raised	Employment Opportunity & Local Development
No. of people attended	• About 500 People were present • 26 No. Verbal representation • 82 No. Written Representation/ Responses received from local people/villagers

Summary of Public Needs highlighted during the public consultation:

Category	Key Concerns Raised	Responses Provided
Local Development	During the public hearing, the public was in full support for the proposed Project	The Project Proponent has assured the public that 'development will be done in the project area on priority basis through CER/CSR activities
Community Health & Education	Improvement of Community Health & Education	The Company will focus on improvement in Education, Community Health under the Socio-EMP (CER) Progrom
Employment	Employment Opportunities	The company is committed to providing preference to locals based on their educational qualification and experience
Community Infrastructure Development & Women Empowerment	Development of Community Rural infrastructure & women ampeworment	The company proposes to focus on developrnent of the project area in the following creas under the Socio-EMP (CER) initiative: Education, Health, Sustainable Livelihood Development, Community Infrastructure Development, compony will support women through Sustanctile Livelihood Development initiative

Action plan as per MoEF&CC O.M. dated 30/09/2020 to address the concerns of public consultation:

Sr. No	Physical Activity/Target and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
A	**Educational Initiatives**						
	Modernization, Repair & construction/maintenance of identified Primary / Higher Secondary School of nearby villages of the project site in consultation with Local Government/School Authorities in villages Chhatai & Majhtoliya.	1.0	1.5	1.5	1.5	1.5	7.0
	Distribution of drinking water filters/Drinking water coolers in schools in Umarda and others nearby villages.	0.7	0.7	0.7	0.7	0.7	3.5
	Basic teaching and learning infrastructure support to Govt. Schools, Supporting in creation of assembly halls, prayer halls, classrooms and smart class, computer room, space for mid-day meals, playground, school boundary walls etc. for government schools in villages Umarda Chhatai, Kothi, Tarsili.	1.0	1.5	1.5	1.5	1.5	7.0
	Online courses for students in emerging technologies such as Artificial Intelligence, Electric Vehicles, Renewable Energy etc. to equip students with job-ready skills through Adani Skill Development Centre (ASDC).	1.2	1.2	1.2	1.2	1.2	6.0
	Sub Total	**3.9**	**4.9**	**4.9**	**4.9**	**4.9**	**23.5**
B	**Community Health Initiatives**						
	Development of hospitals, strengthening of PHC's & CHC's, and improvement of health facilities in Tarsili & other nearby villages.	1.0	1.5	1.9	2.0	2.0	8.4
	Rural Medical Camps through Medical Team of Primary Health Centre @ 5 Nos. of camps per month (@ 75 patients per camp), Safe Menstrual Hygiene Management Awareness, Mega Health Camp, Cataract Screening & Operation in Kothi, Tarsili, Umarda & other nearby villages. Sanitary napkin vending & disposal machine, provision of Girls' Toilets with regular water supply facilities.	0.8	1.6	1.6	2	2	8
	Promotion of awareness of malnutrition and anemia.	0.24	0.24	0.24	0.24	0.24	1.2
	Promotion of Poshan Vatika at backyard of v	0.68	0.68	0.68	0.68	0.68	3.4

Sr. No	Physical Activity/Target and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
	illagers & Project Suposhan.						
	Sub Total	**2.72**	**4.02**	**4.42**	**4.92**	**4.92**	**21**
C	**Sustainable Livelihood and Women Empowerment**						
	Adani Skill Development Centre (ASDC/SDC) to train the youth under different trades viz. Welding, Fitting, Masonry & Bar-bending, Electrical, industrial machine operating & digital literacy/smart classes.	0.8	1.6	1.6	1.8	1.8	7.6
	Development & Support for Drip irrigation, assistance for mushroom, vegetable cultivation and livestock management in core zone villages.	0.74	0.74	0.74	0.74	0.74	3.7
	Sub Total	**1.54**	**2.34**	**2.34**	**2.54**	**2.54**	**11.3**
D	**Community Infrastructure Development**						
	Repairing, strengthening & Maintenance of Existing Roads in consultation with Gram Panchayats/Local Administration	1.0	3.0	3.0	3.5	1.0	11.5
	To provide facility for potable drinking water, and water supply system through overhead tanks	0.4	0.4	0.4	0.4	0.4	2.0
	Creation of clean and hygienic environment by proper drainage systems, community sanitation campaign, waste management awareness etc. implementation of Swachchh Bharat Initiative.	0.6	0.6	0.8	0.8	0.7	3.5
	Upgradation & Renovation of sanitation facilities such as toilets in schools with priority for girls.	1.4	1.4	1.4	1.4	1.4	7.0
	Provision of Solar Power and street lighting/panels in nearby schools, local health centers of nearby villages, green nurturing programs, plantation drives etc.	1.02	1.02	1.02	1.02	1.02	5.1
	Sub Total	**4.42**	**6.42**	**6.62**	**7.12**	**4.52**	**29.1**
E	**Sports & Culture Development**						
	Promotion of sports for youths and women	0.46	0.46	0.46	0.46	0.46	2.3
	Cultural activities for villagers	0.16	0.16	0.16	0.16	0.16	0.80

Sr. No	Physical Activity/Target and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
	Sub Total	**0.62**	**0.62**	**0.62**	**0.62**	**0.62**	**3.10**
F	Tree plantation in Govt. School and Community Health Centre in Villages Umarda, Chhatai & Tarsili	**0.7**	**0.7**	**0.7**	**0.7**	**0.7**	**3.50**
Total Budget		**13.9**	**19**	**19.6**	**20.8**	**18.2**	**91.5**

28.8.14: The capital budget of the proposed project is Rs. 36,600 Crores and the capital cost for environmental protection measures is proposed as Rs. 5,994 Crores (Excluding cost towards addressal of Public Consultation issues). The annual recurring cost towards the environmental protection measures is proposed as Rs. 61.25 Crores (Excluding cost towards addressal of Public Consultation issues). The employment generation from the proposed project (Construction Phase) is 350 (Permanent) and 8,000 (Contractual) and during Operation phase; (550 – Permanent & 2000 Contractual). The details of cost for environmental protection measures are as follows:

S. No.	Item Description	Cost (Rs. in Crores)	Recurring Cost (Rs. in Crores)
1	Air Pollution Control	4869	50.0
2	Noise Control	6.5	0.50
3	Water Pollution Control (Including RWH +Solar)	507	5.0
4	Ash Management	504.5	5.5
5	Environmental Monitoring & Management	21.75	0.25
6	Green Belt Development	24 (Capital & Recurring 5 years plan)	
	Total	**5994 Crores (5 Years)**	
7	Addressal of Public Consultation issues	91.5 (CER budget for 5 years)	

28.8.15: The proposed greenbelt will be developed in 123 Ha which is about 33.15% of the total proposed project area of 371 Ha with a total sapling of 3,17,500 nos. A 10m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 3,17,500 saplings will be planted and nurtured in 123 hectares in 5 years.

Budget of 24.0 Crores is earmarked for Greenbelt development including recurring budget is 6.04 Crores for Maintenance/Casualty replacement.

Phase Wise Plan (5years) for Green Belt Development:

Year	Plantation on safety zone & Un-worked Area		Cost of sapling along with maintenance	
	Area (Ha.)	**No. of Trees (estimated)**	**Capital cost**	**Recuring cost/Annum**
2025-26	30.9	77,250	for Plantation/ G	Maintenance/ Casualty re

2026-27	32.2	80,500	reenbelt development	placement- 6.04 Crore
2027-28	12.58	31,450		
2028-29	27.45	68,625		
2029-30	6.95	17,375		
	12.92	42,300		
Total	**123**	**3,17,500**	**18 Crores**	**6.04 Crores**
			Total 24 Crores	

28.8.16: Ash management

Details	**Annual generation (MTPA)**	**Utilization (MTPA)**	**% of utilization**	**Balance quantity (MTPA)**	**No. of storage silos with capacity**
Ash (Fly & Bottom)	**5.32**	**5.32**	**100**	**0**	**5 x 2500 MT**

S.No.	**Details of Ash Pond**	**Ash pond**
1.	Area (Ha)	47
2.	Dyke height (m)	15
3.	Volume (m^3)	70.5 Lac m^3
4.	Quantity of ash to be disposed (Metric Tons)	84.6 Lac MT
5.	Expected life of ash pond (number of years and months)	Life of ash dyke is calculated as 20 years
6.	Type lining carried in ash pond: HDPE lining of LDPE lining or clay lining or No lining	HDPE
7.	Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD)	HCSD/MCSD
8.	Ratio of ash: water in slurry mix (1:_):	65:35
9.	Ash water recycling system (AWRS): Yes or No	Yes
10.	Quantity of wastewater from ash pond to be discharged into land or water body (m^3)	0
11.	Details regarding dyke stability study and name of the organization who conducted the study:	N.A

S.No.	Activity (as applicable)	Quantity	Percentage
	Fly ash based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	0.106 MTPA	2%
	Cement manufacturing	4.256 MTPA	80%
	Construction of roads, road and fly over embankment	0.958 MTPA	18%
	Total	**5.32 MTPA**	**100%**

28.8.17: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration is furnished as below:

S. No	Issuing authority	Date	Reasons for the issuance of SCN	Status of reply submission	Present status
1	Not Applicable.				

Any violation case pertaining to the project on following: i. The Environment Protection Act, 1986 ii. Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980. iii. The Wildlife (Protection) Act, 1972	

28.8.18: Compliance to the observations of sub-committee visit report: The EAC sub-committee had visited the site on 3rd July'2025. Point wise action plan for compliance of sub-committee recommendations are as below:

Sl. No.	Observations by EAC Sub-Committee	Compliance Status
1	As river Kewai is flowing close to the plant boundary, minimum 500 meters distance should be maintained between the Kewai river and ash pond. The river side shall be strengthened with earthen structure and proper construction of bund to avoid erosion and leakage. Further, three tier plantations should be carried out all along the plant boundary falling close to river.	500m distance shall be maintained between the Kewai River and the ash pond. To further mitigate risks of erosion and leakage; silt curtains/sedimentation ponds, and a rainwater harvesting pond with reinforced bunds have been proposed. The plant will operate on a Zero Liquid Discharge (ZLD) principle. Additionally, a three-tier plantation scheme using native species will be implemented to enhance ecological resilience.
2	PP should prepare a phase wise plan for the green belt development along the boundary of project area, internal roads, residential colony and other gap area with suitable plant species in consultation with the Agriculture / Horticulture /Forest Department. The greenbelt development along the plant boundary should be initiated right from the beginning of the project	Noted and agreed. A green belt covering 123 hectares will be developed along the plant boundary, internal roads, and other designated areas of the proposed Thermal Power Plant (TPP). Native species have been selected for the plantation, and this selection has been authenticated by the Divisional Forest Officer (DFO), Anuppur, vide letter no. Kramak/Ma.Chi/2025/3245 Dated:22.05.2025. The green belt development will commence from the inception of the project. Phase wise action plant (05 years) has been prepared and presented below.

Sl. No.	Observations by EAC Sub-Committee	Compliance Status
3	Adequate environmental safety measures must be planned for the health and safety of the school children and villagers located close to the plant site	To ensure the health and safety of school children and villagers residing near the plant site, the following environmental safety measures have been proposed:

28.8.19: Name of the EIA consultant: M/s Gaurang Environmental Solutions Pvt. Ltd. Certificate No. NABET/EIA/2326/RA 0338 Valid up to: 07.12.2026].

28.8.20: Written submissions

The written submission made by the proponent during the meeting is furnished as below:

S.No.	Additional Information Sought	Point-wise Reply/Clarification
	PP shall re-visit and submit revised Traffic impact assessment for the project.	Revised Traffic Assessment considering strengthening & widening of village road from State Highway to Project Site has been submitted.
	PP shall submit revised Brief Information/summary Format w.r.t recommendations of Sub-Committee of EAC & action plan to comply with same & details of court cases.	Revised Brief information/summary has been submitted.
	PP shall submit measures adopted for water optimization for proposed TPP.	Water requirement has been optimized to <2.5 m^3/MWh which is well within the 3.0 m^3/MWh stipulated by MoEFCC prescribed standard. Details water optimization measures for proposed TPP has been submitted.

In addition to above, we hereby Undertake and Confirm that:

1) Solar PV of 5 MW will be installed in the project site / available land in Anuppur district through Socio-EMP.
2) Plantation around the plant boundary will be initiated in the first year of project commencement.
3) Transportation of 70-80% of Fly ash will be done by rail.

3.2.3. Deliberations by the committee in previous meetings

N/A

3.2.4. Deliberations by the EAC in current meetings

Observations and deliberation of the EAC

28.8.21: The Committee observed and noted the following:

i. Instant proposal is for seeking Environmental Clearance for setting up of 4x800 MW Coal Based Ultra Super Critical Thermal Power Plant (USCTPP) by M/s Anuppur Thermal Energy (MP) Private Limited located at Villages Chhatai, Majhtoliya & Umarda, Tehsil Kotma, District Anuppur, Madhya Pradesh.

ii. The Project Site for instant proposal was earlier accorded Environmental Clearance (EC) was granted by the MoEF&CC, New Delhi vide File no. J 13012/144/2010-IA. II (T) dated 27.11.2012 to M/s Welspun Energy Anuppur Pvt. Ltd. for 1320 (2x660) MW Thermal Power Plant. Subsequently, M/s Welspun Energy Anuppur Pvt. Ltd. had obtained Consent to Establish (CTE) from Madhya Pradesh Pollution Control Board (MPPCB) vide letter dated 18.07.2013. Further, the MoEF&CC issued Transfer of Environmental Clearance to Anuppur Thermal Energy (MP) Private Ltd (ATEMPPL) & validity extension up to 26.11.2022, New Delhi vide letter No. F. No: J-13012/144/2010-IA. II(T) dated 07.01.2020. There is no activity undertaken at the site except the boundary wall construction. The validity of the EC lapsed on 26/11/2023. Now the configuration has changed from 2x660 MW to 4x800 MW in an area of 371 and de-novo EC process has been initiated.

iii. The EAC also took into consideration the drone survey of the project site and KML file on the Google Earth

presented by the project proponent along with DSS of the project site on PARIVESH portal.
iv. There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site as ascertained from DSS.
v. The project site is not located within the Critically Polluted Area (CPA) / Severally Polluted Area (SPA) as per CEPI assessment 2018 of CPCB.
vi. As per the categorization of CPCB, the proposed project do not fall within any CPA nor in any non-attainment cities as per MoEF &CC notification G.S.R. 465(E) dated 11/07/2025. Hence, it is classified as Category 'C' project with respect to FGD installation as per the records made available by the project proponent.
vii. ToR was granted vide letter dated 28.10.2024.
viii. Total land of 371 ha is required for the project. The land is already under the possession of project proponent. No forest land is involved.
ix. Kewai River flows at a distance of approximately 70 meters west (as per DSS) of the proposed Anuppur Thermal Power Project site. As required by MoEF&CC O.M. dated 14.02.2022, the HFL certificate from WRD, Anuppur received. HFL of Kewai River is 538.5m (MSL) whereas proposed project Site elevation is 562m (MSL) which is substantially higher elevation. In compliance with the siting criteria and to ensure the ecological integrity of the river, the project layout has been designed outside the HFL influence zone and includes a greenbelt buffer along the riverbank. A detailed river conservation action plan will be adopted, which includes:
• Maintaining a safe setback distance from the river edge.
• Plantation of native species to stabilize the riverbank.
• Avoiding any discharge or obstruction in the natural flow of the river.
• Regular monitoring of surface water quality.
In this regard, proponent committed that 500m distance shall be maintained between the Kewai River and the ash pond. To further mitigate risks of erosion and leakage; silt curtains/sedimentation ponds, and a rainwater harvesting pond with reinforced bunds have been proposed.
x. Total 16 Schedule I Species found in the buffer zone during field survey and secondary sources. Wildlife and conservation plan for schedule I species prepared and submitted for approval.
xi. Total fresh water requirement is 153425 KLD. Approval for drawing 153425 KLD of water for all 4 units from River Sone has been obtained from WRD, Madhya Pradesh vide letter dated 21/01/2025. The water will be transported to the plant site through pipeline.
xii. The power requirement for the proposed project is estimated as 7.5 MW during Construction Phase and will be obtained from nearby UP Electricity Board Sub-station
xiii. Two numbers 275 meters high Chimney (Twin flue) is proposed and proponent will abide by and adhere to all the Notifications/ Directives issued by the MoEFCC from time to time regarding the TPP.
xiv. Zero Liquid Discharge system will be adopted.
xv. Transportation of coal will be done 100% by rail. No road transportation is involved.
xvi. The proposed greenbelt will be developed in 123 Ha which is about 33.15% of the total proposed project area of 371 Ha with a total sapling of 3,17,500 nos. A 10m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 3,17,500 saplings will be planted and nurtured in 123 hectares in 5 years.
xvii. Ash pond is proposed in an area of 47 Ha for ash disposal.
xviii. Public hearing for the project was held on 15/05/2025. The Committee looked in to the videography of the public hearing proceedings, deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory. The committee advised the PP to implement the PH action plan in a time bound manner. An amount of Rs. 91.25 crores has been earmarked to address the issues raised during public hearing.
xix. The capital budget of the proposed project is Rs. 36,600 Crores and the capital cost for environmental protection measures is proposed as Rs. 5,994 Crores (Excluding cost towards addressal of Public Consultation issues). The annual recurring cost towards the environmental protection measures is proposed as Rs. 61.25 Crores (Excluding cost towards addressal of Public Consultation issues).
xx. The Committee deliberated on the baseline data and incremental GLC due to the proposed project. The committee noted that the proponent is providing Electrostatic Precipitator (ESP), Low Nox Burner, SOFA technology and Dust Extraction & Suppression System to control the emission of Particulate matter and NOx and also stacks with a height of 275 m will be provided to control & regulate the air emission from the proposed project.
xxi. Committee deliberated on the action plan of Hydrogeology study; Bio-diversity/aquatic ecology study and Risk assessment study and found it satisfactory.
xxii. The committee noted that with respect to water pollution control, domestic wastewater will be treated in Sewage treatment plant and treated sewage water shall be reused. Effluent will be treated in ETP. There will be no effluent discharge from the premises, hence the ZLD will be maintained. A state-of-the-art roof top rain water harvesting system will be provided to collect the run -off for ground water recharging.
xxiii. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components.
xxiv. There are seven court cases pending and no case is related to the environment related matters.

xxv. The EAC also deliberated on the written submission of the project proponent and found it satisfactory.
xxvi. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
Recommendations of the Committee:
28.8.22: In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 **subject to uploading of written submission on PARIVESH Portal** and stipulation of the following specific conditions and general conditions based on project specific requirements:

3.2.5. Recommendation of EAC

Recommended (Subject to submission of requisite information/ documents)

3.2.6. Details of Environment Conditions

3.2.6.1. Specific

[A] Environmental Management	
1.	Project proponent shall ensure that 100% utilization of ash generated from the project in accordance with the ash utilization notification dated 31/12/2021 and its subsequent amendment. Area for the proposed ash dyke shall not exceed 47 ha as committed.
2.	Project layout shall be kept outside the HFL influence zone of Kewai river and greenbelt buffer shall be developed all along the periphery of the riverbank as committed. A detailed river conservation action plan shall be adopted inter-alia the following: • Maintaining a safe setback distance from the river edge. • Plantation of native species to stabilize the riverbank. • Avoiding any discharge or obstruction in the natural flow of the river. • Regular monitoring of surface water quality. • 500m distance shall be maintained between the Kewai River and the ash pond. • Silt curtains/sedimentation ponds, and a rainwater harvesting pond with reinforced bunds shall be established.
3.	Project proponent shall establish 5 Continuous Ambient Air Quality Monitoring Stations (CAAQMS) at suitable locations in and around project site in consultation with MPPCB within one year from the date of grant of EC.
4.	Project proponent shall comply with the recommendations made in the biodiversity assessment report and Hydrogeology report in a time bound manner. Compliance status in this regard shall be submitted to the Regional Office of MoEF&CC along with the six monthly compliance report.
5.	The water requirement for project is estimated as 153425 KLD and the same shall be met from Sone River. The specific water consumption for all the units shall be less than 3.0 m3/MWhr.
6.	The entire coal requirement for 4 units of TPP (4x800 MW) shall be transported by rail network only and no road transportation is permitted.
7.	Project proponent shall store harvested rainwater in the project boundary and utilize the same for plantation, recharging water in the pond and domestic utilization in colonies. A record shall be maintained of water collected through rainwater and its supply system. PP shall get the water audit done every year to optimize the water requirement.
8.	Project proponent shall implement the protective measure proposed in EMP in a time-bound manner. The budget earmarked for the same is Rs. 5994 crores and should be kept in separate accounts and audited annually. The implementation status along with the amount spent with documentary proof shall be submitted to the concerned

	Regional Office for the activities carried out during the previous year.
9.	Project proponent shall assess the carbon footprint of the project and develop carbon sink/carbon sequestration resources using modern technologies. The implementation report shall be submitted to the concerned Regional Office of the MoEF&CC.
10.	Project proponent shall ensure that diesel operated vehicles will be switched over to E-Vehicles/CNG vehicles in a time bound manner, replace the passenger vehicles to E-vehicle in phased manner. Further, for local movement of officials, Contract of Vehicles deployment shall be awarded to Project affected people and all efforts for adopting heavy E-vehicles/CNG vehicles like Bulkers for ash transportation for short distance subject to availability of such E-vehicle and adequate charging infrastructure in the surrounding area shall be provided. PP shall submit the action taken report to concerned RO with amount spent, photographs (before & after), number of such non diesel vehicles deployed etc. in six monthly compliance report.
11.	The Project Proponent shall provide two stacks of each 275 meters height and shall abide by the provisions of the notification number G.S.R 465 (E) dated 11/07/2025 related to FGD.
12.	Project proponent shall ensure that pipelines carrying the fly ash and effluent shall be inspected regularly for any leakages.
13.	Effluent of 2125 KLD will be treated through Effluent Treatment Plant. As committed by the Project proponent, Zero liquid discharge shall be adopted for the existing and the proposed plant. No wastewater will be discharged outside the project site.
14.	PP shall implement the concurrent plantation plan in a time bound manner. Total of 123 ha area (33% of total area of 371 ha) will be developed as greenbelt. A 5 m - 50 m wide (min 25 m) greenbelt, consisting of at least 3 tiers around plant boundary & kewai river will be developed as greenbelt and green cover as per CPCB guidelines within 3 years. PP shall also adopt Miyawaki plantation technique and plantation with minimum 2 meter height of the saplings. PP should annually submit the audited statement of expenditure along with proof of activities viz. photographs (before & after with geolocation date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC and on PARIVESH Portal as the case may be for the activities carried out during previous year.
15.	Project proponent shall carry out community plantation with incentive scheme by distributing 50,000 saplings per year for a period of five years. Further, PP shall provide basic facilities to the nearby schools such as drinking water, sanitation facilities (sanitary napkin vending machines) and shall also develop green belt around the nearby schools. Further, PP shall organize quarterly awareness programs for school students to educate them on the significance and preservation of trees.
16.	Wildlife conservation plan as approved by the competent authority shall be implemented. Additional, budget shall be added in the plan, in case additional measures suggested by state wildlife department. The final Wildlife conservation plan duly approved by the CWLW shall be submitted to RO, MoEF&CC within a time frame of three months from the date of grant of EC and the budget approved by the concerned authority shall be deposited in a government account.
17.	Project proponent shall install LED display of air quality (Continuous AAQ monitoring) and stack emission (Continuous emission monitoring) at prominent locations preferably outside the plant's main entrance for public viewing and in administrative complex and maintenance of devices shall be done regularly.
18.	Project proponent shall carry out Water Sprinkling on roads inside the plant area/ administrative/ residential areas and outside the plant area at least for 2 KM on a regular basis to control the air pollution. A logbook shall be maintained for the activity and be in six-monthly compliance report.
19.	PP shall deploy vacuum based vehicle for everyday cleaning of the road in and around plant site at least for 5 KM.
20.	Environment Audit of plant shall be done annually and report shall be submitted to Regional office of the Ministry.

21.	A detailed action plan regarding leachate handling shall be prepared and implemented in consultation with SPCB and the same shall be submitted to the Regional Office of the Ministry. Leachate shall be treated and reused. No treated leachate shall be discharged in any circumstances. Characteristics of Leachate and the treated leachate shall be monitored once in quarter and records shall be maintained.
22.	Oil and grease recovered from the treatment plant should be disposed only through authorized recyclers.
23.	Monitoring of surface water quality and Ground Water quality shall also be regularly conducted in and around the project site and records to be maintained. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall also be undertaken and results/findings submitted along with half yearly monitoring report. The monitored data shall be submitted regularly on PARIVESH portal as part of Half Yearly compliance report.
24.	For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
25.	PP shall install a solar panel capacity of 5 MW or more as per the availability of the area.
26.	PP shall ensure that all types of plastic waste generated from the plant shall be stored separately in isolated area and disposed of strictly adhering to the Plastic Waste Management Rules 2016 (as amended). In pursuant to the Ministry's OM dated 18/07/2022. PP shall also create awareness among the people working in the project area as well as in its surrounding area on the ban on Single Use Plastic (SUP) in order to ensure compliance of Ministry's Notification published by the Ministry on 12/08/2021. A report along with photograph on the measures taken shall also be included in the six monthly compliance report submitted by PP.
27.	PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than Green belt development. The action in this regard shall be submitted concerned RO in six monthly report.
[B] Socio-economic	
1.	A vision document comprising prospective plan for implementation of various CER activities, plantation programme outside the project cover area, rejuvenation and conservation of water bodies within 5 km radius of the project cover area shall be prepared and submitted to the Regional Office of the Ministry within 6 months. Implementation status of the same shall be reported to the Regional office in 6 monthly compliance report.
2.	Epidemiological Study among population within 5 km radius of project cover area shall be carried out on regular interval (Once in two year) through independent agency. Necessary measures shall be taken as per findings of study in consultation with district administration. Action taken report shall be submitted to the Regional Office of the Ministry.
3.	The budget proposed for PH is Rs. 91.25 Crores. The budget proposed shall be kept in a separate account and audited annually. Project proponent shall implement the action plan to address the issues raised during public hearing within a time frame of 5 years from the date of grant of EC. In addition to this, PP shall strengthen the existing Primary Health Center (PHC) & Community Health Center (CHC) in the study area for better public health as committed. Compliance status in this regard shall be submitted along with the six monthly compliance to the concerned Regional Office of MoEF&CC.
4.	The establishment of a robust public grievance redressal mechanism to address concerns and complaints from local communities regarding the power plant's operations, environmental impacts, or social issues shall be developed. A Senior Officer shall review the functioning of the mechanism twice in a month.
[C] Miscellaneous	
1.	An Environmental Cell headed by the Environment Manager with postgraduate qualification in environmental

	science/environmental engineering, shall be created. It shall be ensured that the Head of the Cell shall directly report to the Head of the Plant who would be accountable for implementation of environmental regulations and social impact improvement/mitigation measures.
2.	Consent for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
3.	All necessary clearance from the concerned Authority, as may be applicable should be obtained prior to commencement of project or activity.

3.2.6.2. Standard

1(d)	**Thermal Power Plants**
Statutory compliance	
1.	Emission Standards for Thermal Power Plants as per Ministry's Notification S.O. 3305(E) dated 7.12.2015, G.S.R.593(E) dated 28.6.2018 and as amended from time to time shall be complied.
2.	Part C of Schedule II of Municipal Solid Wastes Rules, 2016 dated 08.04.2016 as amended from time to time shall be complied for power plants based on Municipal Solid Waste.
3.	MoEF&CC Notifications on Water Consumption vide Notification No. S.O. 3305 (E) dated 07.12.2015 read with G.S.R 593 (E) dated 28.6.2018 as amended from time to time shall be complied.
4.	The recommendation from Standing Committee of NBWL under the Wildlife (Protection) Act, 1972 should be obtained, if applicable.
5.	No Objection Certificate from Ministry of Civil Aviation be obtained for installation of requisite chimney height and its siting criteria for height clearance.
Ash content/mode of transporatation of coal	
1.	MoEF&CC Notification issued vide S.O. 1561 (E) dated 21.05.2020 and as amended from time to time shall be complied which inter-alia include use of coal by Thermal Power Plants, without stipulations as regards ash content or distance, shall be permitted subject to compliance of conditions prescribed under (1) Setting Up Technology Solution for emission norms, (2) Management of Ash Ponds and (3) Transportation.
Air quality monitoring and Management	
1.	Project proponent shall abide by the provisions of the notification number G.S.R 465(E) dated 11/07/2025 related to FGD.
2.	Low NOX Burners with Over Fire Air (OFA) system shall be installed to achieve NOX emission standard of 100 mg/Nm3.
3.	High efficiency Electrostatic Precipitators (ESPs) shall be installed in each unit to ensure that particulate matter (PM) emission to meet the stipulated standards of 30 mg/Nm3.
4.	Stack with a height of 275 meters shall be provided with continuous online monitoring instruments for SO2, Nox and Particulate Matter as per extant rules.
5.	Exit velocity of flue gases shall not be less than 20-25 m/s. Mercury emissions from stack shall also be monitored periodically.

6.	Continuous Ambient Air Quality monitoring system shall be set up to monitor common/criteria pollutants from the flue gases such as PM10, PM2.5, SO2, NOXwithin the plant area at least at one location. The monitoring of other locations (at least three locations outside the plant area covering upwind and downwind directions at an angle of 120° each) shall be carried out manually.
7.	Adequate dust extraction/suppression system shall be installed in coal handling, ash handling areas and material transfer points to control fugitive emissions.
8.	Appropriate Air Pollution Control measures (DEs/DSs) be provided at all the dust generating sources including sufficient water sprinkling arrangements at various locations viz., roads, excavation sites, crusher plants, transfer points, loading and unloading areas, etc.
Noise pollution and its control measures	
1.	The Ambient Noise levels shall meet the standards prescribed as per the Noise Pollution (Regulation and Control) Rules, 2000.
2.	Persons exposed to high noise generating equipment shall use Personal Protective Equipment (PPE) like earplugs/ear muffs, etc.
3.	Periodical medical examination on hearing loss shall be carried out for all the workers and maintain audiometric record and for treatment of any hearing loss including rotating to non-noisy/less noisy areas.
Human Health Environment	
1.	Bi-annual Health check-up of all the workers is to be conducted. The study shall take into account of chronic exposure to noise which may lead to adverse effects like increase in heart rate and blood pressure, hypertension and peripheral vasoconstriction and thus increased peripheral vascular resistance. Similarly, the study shall also assess the health impacts due to air polluting agents.
2.	Impact of operation of power plant on agricultural crops, large water bodies (as applicable) once in two years by engaging an institute of repute. The study shall also include impact due to heavy metals associated with emission from power plant.
Water quality monitoring and Management	
1.	Induced/Natural draft closed cycle wet cooling system including cooling towers shall be set up with minimum Cycles of Concentration (COC) of 5.0 or above for power plants using fresh water to achieve specific water consumption of 3.0 m3/MWhr.
2.	In case of the water withdrawal from river, a minimum flow 15% of the average flow of 120 consecutive leanest days should be maintained for environmental flow whichever is higher, to be released during the lean season after water withdrawal for proposed power plant.
3.	Records pertaining to measurements of daily water withdrawal and river flows (obtained from Irrigation Department/Water Resources Department) immediately upstream and downstream of withdrawal site shall be maintained.
4.	Regular (at least once in six months) monitoring of groundwater quality in and around the ash pond area including presence of heavy metals (Hg, Cr, As, Pb, etc.) shall be carried out as per CPCB guidelines. Surface water quality monitoring shall be undertaken for major surface water bodies as per the EMP. The data so obtained should be compared with the baseline data so as to ensure that the groundwater and surface water quality is not adversely impacted due to the project & its activities.
5.	The treated effluents emanating from the different processes such as DM plant, boiler blow down, ash pond/dyke, sewage, etc. conforming to the prescribed standards shall be re-circulated and reused. Sludge/ rejects will be disposed in accordance with the Hazardous Waste Management Rules.

6.	Hot water dispensed from the condenser should be adequately cooled to ensure the temperature of the released surface water is not more than 5 degrees Celsius above the temperature of the intake water.
7.	Wastewater generation of 2125 KLD from various sources (viz. cooling tower blowdown, boiler blow down, wastewater from ash handling, etc) shall be treated to meet the standards of pH: 6.5-8.5; Total Suspended Solids: 100 mg/l; Oil & Grease: 20 mg/l; Copper: 1 mg/l; Iron:1 mg/l; Free Chlorine: 0.5; Zinc: 1.0 mg/l; Total Chromium: 0.2 mg/l; Phosphate: 5.0 mg/l.
8.	Sewage generation of 22 KLD will be treated by setting up Sewage Treatment plant to maintain the treated sewage characteristics of pH: 6.5-9.0; Bio-Chemical Oxygen Demand (BOD): 30 mg/l; Total Suspended Solids: 100 mg/l; Fecal Coliforms (Most Probable Number).
9.	Action plan by the TPPs located within 50 km of a municipality or any Urban Local Body (ULB) to use the treated sewage water produced by the municipality/Urban Local Body(ULB) to reduce fresh water consumption.
Risk Mitigation and Disaster Management	
1.	Adequate safety measures and environmental safeguards shall be provided in the plant area to control spontaneous fires in coal yard, especially during dry and humid season.
2.	Storage facilities for auxiliary liquid fuel such as LDO and HFO/LSHS shall be made as per the extant rules in the plant area in accordance with the directives of Petroleum & Explosives Safety Organisation (PESO). Sulphur Content in the liquid fuel should not exceed 0.5%.
3.	Ergonomic working conditions with First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
4.	Safety management plan based on Risk Assessment shall be prepared to limit the risk exposure to the workers within the plant boundary.
5.	Regular mock drills for on-site emergency management plan and Integrated Emergency Response System shall be developed for all kind of possible disaster situations.
Green belt and Biodiversity conservation	
1.	Green belt shall be developed in an area of 33% of the total project with indigenous native tree species in accordance with CPCB guidelines.
2.	In-situ/ex-situ Conservation Plan for the conservation of flora and fauna should be prepared and implemented.
Waste management	
1.	Solid waste management should be planned in accordance with extant Solid Waste Management Rules, 2016.
2.	Toxicity Characteristic Leachate Procedure (TCLP) test shall be conducted for any substance, potential of leaching heavy metals into the surrounding areas as well as into the groundwater.
3.	Ash pond shall be lined with impervious liner as per the soil conditions. Adequate dam/dyke safety measures shall also be implemented to protect the ash dyke from getting breached.
4.	Fly ash shall be collected in dry form and ash generated shall be used in phased manner as per provisions of the Notification on Ash Utilization issued by the Ministry S.O. 5481 dated 31.12.2021, S.O.6169 (E) dated 30.12.2021, S.O.05 (E) dated 01.01.2024 and amendment thereto.
5.	Unutilized ash if any shall be disposed off in the ash pond in the form of High Concentration Slurry method.

Monitoring of compliance	
1.	Environmental Audit of the project be taken up by the third party for preparation of Environmental Statement as per Form-V & Conditions stipulated in the EC and report be submitted to the Ministry.
2.	Resettlement & Rehabilitation Plan as per the extant rules of Govt. of India and respective State Govt. shall be followed, if applicable.
3.	Energy Conservation Plan to be implemented as envisaged in the EIA / EMP report. Renewable Energy Purchase Obligation as set by MoP/State Government shall be met either by establishing renewable energy power plant (such as solar, wind, etc.) or by purchasing Renewable Energy Certificates.
4.	Energy and Water Audit shall be conducted at least once in two years and recommendations arising out of the Report should be followed. A report in this regard shall be submitted to Ministry's Regional Office.
5.	The project proponent shall (Post-EC Monitoring): a. send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government; b. upload the clearance letter on the web site of the company as a part of information to the general public. c. inform the public through advertisement within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forest and Climate Change (MoEF&CC) at http://parviesh.nic.in. d. upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same periodically; e. monitor the criteria pollutants level namely; PM (PM10& PM2.5incase of ambient AAQ), SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company; f. submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB; g. submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company; h. inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project and the date of commencement of the land development work.
Corporate Environmental Responsibility (CER) activities	
1.	CER activities will be carried out as per Ministry's OM F.No.22- 65/2017- IA.III dated 30th September, 2020 and 22-65/2017- IA.III dated 25.02.2021 or as proposed by the PP in reference to Public Hearing or as earmarked in the EIA/EMP report along with the detailed scheduled of implementation with appropriate budgeting.

3.3. Agenda Item No 3:

3.3.1. Details of the proposal

Expansion of 2x800 MW (Stage-I) Darlipali Supercritical Coal Based Thermal Power Plant by Addition of One Unit of 800 MW [1x800MW(Stage-II) Darlipali Super Thermal Power Project] at Village Darlipali, Raidihi, in L ephripara Tehsil, Village Chuabahal, Kalamegha, Laikera, Bihajor, Kanaktura in Hemgir Tehsil of Sundergarh District and Village Tileimal, Chichinda, Kechobahal, in Jharsuguda Tehsil and Village Chhadarama in Lakhan pur Tehsil of Jharsuguda District in Odisha by **NTPC LIMITED** located at **SUNDARGARH,ODISHA**

Proposal For		Application for amendment in ToR (for categories A & B1)/Amendment in EC (for category B2)- Form-3	
Proposal No	**File No**	**Submission Date**	**Activity (Schedule Item)**
IA/OR/THE/544298/2025	J-13012/65/2008-IA.II(T)	09/07/2025	Thermal Power Plants

			(1(d))

3.3.2. Project Salient Features

Agenda No. 28.9

28.9. Expansion of 2x800 MW (Stage-I) Darlipali Supercritical Coal Based Thermal Power Plant by Addition of One Unit of 800 MW [1x800MW(Stage-II) Darlipali Super Thermal Power Project by **M/s. NTPC Limited** located at **Village Darlipali, Raidihi, in Lephripara Tehsil, Village Chuabahal, Kalamegha, Laikera, Bihajor, Kanaktura in Hemgir Tehsil of Sundergarh District and Village Tileimal, Chichinda, Kechobahal, in Jharsuguda Tehsil and Village Chhadarama in Lakhanpur Tehsil of Jharsuguda District in Odisha - Amendment in Term of Reference (ToR) – regarding.**

[Proposal No: IA/OR/THE/544298/2025; F.No. J-13012/65/2008-IA. II (T)]

Name of the EIA consultant: M/s Mantec Consultants Pvt Ltd, Noida. [S. No. 136. List of ACOs with their Certificate No.: NABET/EIA/23-26/RA 0305_Rev.01 (Valid up to 20 April 2026].

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

S. N.	Configuration	Capacity (MW)	As per EC dated 17.02.2014	Implementation Status as on 05.06.2025	Production
1	(2x800 MW)	1600 MW	2x800 MW (Stage-I) Darlipali Supercritical Coal Based Thermal Power Plant at village Darlipali, in Lephripara Taluk, in Sundergarh Distt., in Orissa	Under Operation	

S. No.		Terms of Reference (TOR)	Capacity (MW)	Date of
1		Expansion of Darlipali Super Coal Based Thermal Power Project by installing lx800 MW (Stage-II) project in existing project (2x800 MW) at village Darlipali, Taluk Lephripara, District Sundergarh (Orissa) by M/ s NTPC Limited		17.04.2023

28.9.3 Implementation status of the ToR: Project site falls in two Districts namely Sundergarh and Jharsuguda of Odisha State. The Implementation status of the ToR dated 17.04.2023 is as follows:

S No	Details	Implementation status
01	Baseline	Baseline data was collected for the period April to June 2023.
02	Public Hearing	Public hearing was conducted at two Districts of Odisha: **Jharsudua District:** **Date and Time:** 22.10.2024 at 11:00 A.M. **Venue:** Mundadhipa Football Ground, Tileimal, District-Jharsuguda **Sundergarh District:** **Date and Time:** 04.11.2024 at 10:30 A.M **Venue:** Playground near Chandlipahad, GP: Raidihi, under Lephripara tehsil of Sundargarh district

<table>
<tr><th>Condition no.</th><th>Details of Conditions as per TOR</th><th>Amendment Sought</th><th>Justification</th></tr>
<tr><td>Subject</td><td>Expansion of Darlipali Super Coal Based Thermal Power Project by installing 1x800 MW (Stage-II) project in existing project (2x800 MW) at village Darlipali, Taluk Lephripara, District Sundergarh, Odisha by M/s NTPC Limited-Term of Reference (ToR)-reg.</td><td>Expansion of 2x800 MW (Stage-I) Darlipali Supercritical Coal Based Thermal Power Plant by Addition of One Unit of 800 MW [1x800MW(Stage-II) Darlipali Super Thermal Power Project] at Village Darlipali, Raidihi, in Lephripara Tehsil, Village Chuabahal, Kalamegha, Laikera, Bihajor, Kanaktura in Hemgir Tehsil of Sundergarh District and Village Tileimal, Chichinda, Kechobahal, in Jharsuguda Tehsil and Village Chhadarama in Lakhanpur Tehsil of Jharsuguda District in Odisha by M/s NTPC Limited -Term of Reference(ToR)-reg.</td><td>The Plant falling in two district, accordingly the village, Taluka and district included in subject matter.</td></tr>
<tr><td>4 (ii)</td><td>Water Requirement:
Quantity of water Requirement: 2400 m^3/hr
Cooling System: Water Cooled condenser system</td><td>Water Requirement:
Quantity of water Requirement: 930 m^3/hr
Cooling System: Air Cooled condenser system</td><td>In view of anticipated scarcity of industrial water in future, NTPC pro-actively considered ACC in place of WCC to save water consumption for Darlipali Stage-II (1 x 800 MW) by 60% approximately.
(Reduced the water requirement from 2400 M^3/hr to 930 m^3/hr)
Reduction in water consumption will reduce water withdrawal and shall minimised the impact on local water resources and ecosystems.</td></tr>
<tr><td>4 (ii)</td><td>Land Area Breakup
<table>
<tr><th>Description</th><th>Existing (Ha)</th><th>Proposed (Ha)</th><th>Total (Ha)</th></tr>
<tr><td>Main Plant</td><td>322.534</td><td>45.3248</td><td>367.8588</td></tr>
<tr><td>Township</td><td>62.3216</td><td>0</td><td>62.3216</td></tr>
<tr><td>Ash Pond</td><td>160</td><td>80</td><td>240</td></tr>
<tr><td>Railway siding, c</td><td>54.035</td><td>0</td><td>54.035</td></tr>
</table></td><td>Land Area Breakup
<table>
<tr><th>Description</th><th>Existing (Ha)</th><th>Area Proposed (Ha)</th><th>Total (Ha)</th></tr>
<tr><td>Main Plant</td><td>98.340</td><td>46.592</td><td>144.932</td></tr>
<tr><td>Ash Pond</td><td>160.00</td><td>60.000</td><td>220.000</td></tr>
<tr><td>Sub Total (Plant & Ash Dyke)</td><td>258.34</td><td>106.592</td><td>364.932</td></tr>
</table></td><td>The area under Railway corridor, MGR, Reservoir, Make-up Water Pump House, Storm Water Drains, Peripheral Road and Stores etc., were not mentioned separately and were included under Main Plant area was inadve</td></tr>
</table>

<table>
<tr><th>Condition no.</th><th>Details of Conditions as per TOR</th><th>Amendment Sought</th><th>Justification</th></tr>
<tr>
<td></td>
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<table>
<tr><td>orridors etc.</td><td></td><td></td><td></td></tr>
<tr><td>Green Belt</td><td>76.89</td><td>34.587</td><td>111.4776</td></tr>
<tr><td>Total</td><td>675.78</td><td>159.9124</td><td>835.693</td></tr>
</table>
</td>
<td>
<table>
<tr><td>Green Belt</td><td>110.47</td><td>39.660</td><td>150.130</td></tr>
<tr><td>Green Belt (%) of Main Plant & Ash Dyke Area</td><td>42.76</td><td>37.21</td><td>41.14</td></tr>
<tr><td>Township</td><td>55.210</td><td>0</td><td>55.210</td></tr>
<tr><td>Railway siding, MGR, Outside drains etc.</td><td>159.150</td><td>0</td><td>159.150</td></tr>
<tr><td>Raw water Reservoir</td><td>12.000</td><td>13.660</td><td>25.660</td></tr>
<tr><td>Others (Misc. areas in roads/periphery, office/Stores, make up water pump House etc.)</td><td>80.610</td><td>0</td><td>80.610</td></tr>
<tr><td>Total</td><td>675.780</td><td>159.912</td><td>835.692</td></tr>
</table>
</td>
<td>rtently. Area wise breakup has been mentioned in the revised table.</td>
</tr>
<tr>
<td>4 (ii)</td>
<td>
Breakup of land use of TPP Site
<table>
<tr><td>Nature of land Involved in (Ha)</td><td>Area Existing in Ha (X)</td><td>Additional Area Proposed in Ha (Y)</td><td>Total Area require after expansion in Ha (X+Y)</td></tr>
<tr><td>Non-Forest Land (A)</td><td>661.830</td><td>105.049</td><td>766.88</td></tr>
<tr><td>Forest Land (B)</td><td>13.950</td><td>54.863</td><td>68.813</td></tr>
<tr><td>Total (A+B)</td><td>675.780</td><td>159.912</td><td>835.693</td></tr>
</table>
</td>
<td>
Breakup of land use of TPP Site
<table>
<tr><td>Nature of land Involved in (Ha)</td><td>Area Existing in Ha (X)</td><td>Additional Area Proposed in Ha (Y)</td><td>Total Area require after expansion in Ha (X+Y)</td></tr>
<tr><td>Non-Forest Land (A)</td><td>622.700</td><td>94.611</td><td>717.311</td></tr>
<tr><td>Forest Land (B)</td><td>53.080</td><td>65.301</td><td>118.381</td></tr>
<tr><td>Total (A+B)</td><td>675.780</td><td>159.912</td><td>835.692</td></tr>
</table>
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<td>
Darlipali STPP Stage-I: Total area was 675.780 Ha

The land break up was mentioned as 661.830 Ha non-forest land and 13.95 Ha Forest land.
However, actual land breakup of the same patch is 622.700 Ha and 53.080 Ha as non-forest and forest land respectively.

Darlipali STPS proposed Stage-II expansion: Total area : 159.912 Ha

The land break up was mentioned as 105.049 Ha. non-forest land and 54.863 Ha Forest land.
Accordingly, FC proposal for

</td>
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</table>

Condition no.	Details of Conditions as per TOR	Amendment Sought	Justification
			the forest land involved i.e. 54.863 Ha was submitted at the time of ToR. • Subsequently on verification by State Revenue and Forest Department, the type of land was found to be of forest land area of 65.301 Ha and non-forest land area of 94.611 Ha, without change in total land area involved in Stage-II expansion i.e. 159.912 Ha. • Accordingly, the Forest diversion proposal for 65.301 Ha has been submitted.
The land use for the stage-1 (2 x 800 MW) and for the proposed Stage-II (1 x 800 MW) is 675.780 ha and 159.912 ha, respectively.			

Details of Land and facilities of the stage-I and proposed stage-II project: The land and the facilities of the stage-I and the proposed stage-II project falling under the two districts namely Sundergarh and Jharsuguda District of Odisha State are as follows:

Descri-ption	STAGE-I (2X800 MW)- EXISTING				STAGE-II(1X800 MW)- PROPOSED							
	Existing (Ha)	District	Tehsil	Village	Area Already acquired (Ha)	District	Tehsil	Village	Area to be acquired (Ha)	District	Tehsil	Village
Main plant	98.340	Sundar-garh	Lephri-pada	Darli-pali	26.812	Sundar-garh	Lephri-pada	Darli-pali	19.780	Sundar-garh	Lephri-pada	Darli-pali
Township	55.210	Sundar-garh	Lephri-pada	Darli-pali	--	--	--	--	--	--	--	--

Descri -ption	STAGE-I (2X800 MW)- EXISTING				STAGE-II(1X800 MW)- PROPOSED							
	Existing (Ha)	District	Tehsil	Village	Area Already acquired (Ha)	District	Tehsil	Village	Area to be acquired (Ha)	District	Tehsil	Village
Ash pond	160.000	Sundar-garh	Lephri-pada	Darli-pali	12.460	Sundar-garh	Lephri-pada	Darli-pali	22.922	Sundar-garh	Lephri-pada	Darli-pali
									24.618	Jharsu-guda	Jharsu-guda	Tilei-mal
Railway siding, MGR, Outside drains etc.	150.250	Sundar-garh	Lephri-pada	Darli-pali, Raidihi	--	--	--	--	--	--	--	--
			Hemgir	Chua-bahal, Kala-megha, Laikera, Bihajor, Kanaktura								
	8.900	Jharsu-guda	Jharsu-guda	Chich-inda, Kecho-bahal	--	--	--	--	--	--	--	--
Raw water reservoir	12.000	Sundar-garh	Lephri-pada	Darli-pali	--	--	--	--	13.660	Sundar-garh	Lephri-pada	Darli-pali
Others (Misc. areas in roads/periphery, office/Stores, make up water pump House etc.)	77.480	Sundar-garh	Lephri-pada	Darlipali	--	--	--	--	--	--	--	--
	3.130	Jharsu-guda	Lakhan-pur	Chhadarama	--	--	--	--	--	--	--	

Descri -ption	STAGE-I (2X800 MW)- EXISTING				STAGE-II(1X800 MW)- PROPOSED							
	Existing (Ha)	District	Tehsil	Village	Area Already acquired (Ha)	District	Tehsil	Village	Area to be acquired (Ha)	District	Tehsil	Village
Green Belt	110.470	Sundar-garh	Lephri-pada	Darlipali, Raidihi	--	--	--	--	25.250	Sundar-garh	Lephri-pada	Darli-pali
									14.410	Jharsu-guda	Jharsu-guda	Tilei-mal
District wise total land	663.75	Sundar-garh			39.272	Sundargarh			81.612	Sundar-garh		
	12.030	Jharsu-guda							39.028	Jharsu-guda		
Total (Ha)	675.78				39.272				120.64			
Grand Total (Ha)	**675.78**				**159.912**							

28.9.7: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration shall be furnished.

A. Summary of court cases

There are total 9 case related with Darlipali STPP Stage-I, out of these 04 cases are related with Land Acquisition, 03 Cases related to Contractual disputes, 01 Injunction Suit, 01 case related with Environment Matter which is related with Orissa Human Rights Commission and its details are as given bellow:

S. N	Case No/ Title	Name of the Court	Brief summary of the case	Last Date of Hearing	Next date of Hearing	Direction/Action taken by the PP
1.	OHRC Case No. 3888 of 2024 (2952/OHRC, dated 18.02.2025)	Orissa Human Rights Commission	The complainant alleges that NTPC is violating human rights by polluting the environment in the Sundargarh district, causing health hazards due to emissions from vehicles and chimneys of the power p	22.07.2025	30.10.2025	Comprehensive Reply has been submitted by NTPC on all the issues raised by the complainant along with documentary evidence.

S. N	Case No/ Title	Name of the Court	Brief summary of the case	Last Date of Hearing	Next date of Hearing	Direction/Action taken by the PP
			lant. Complaint states that there is no development in the area since the establishment of project.			On last date, i.e. 22.07.2025, petitioner has submitted its reply on NTPC written submission. Now, NTPC has to file reply on petitioner's submission.

B. **Summary of Show Cause Notices:** 01 no.

S. N.	Issuing authority	Date	Reasons for issuance of SCN	Status of reply to submission	Present status
1	Odisha State Pollution Control Board	19.07.2025	Illegal dumping of Ash	Reply submitted to OSPCB on 23.07.2025	Case is under consideration for personal Hearing in OSPCB.

C. **Summary of violation**

Any violation case pertaining to the project following, i. The Environmental Protection Act, 1986 ii. Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 iii. The Wildlife (Protection) Act, 1972	• Observations have been raised by the MOEF & CC, regarding taking up construction of Make-up Water Pipeline and the 132 KV Transmission line without obtaining Stage-II approval/ working permission for diversion of 25.56 ha of forest land. • It is submitted that the Stage-I approval was accorded on 01.11.2016 and after compliance of the conditions laid down under Stage-I approval, the final (Stage-II) approval, has been accorded by the MOEF &CC on 24th April 2025, vide letter no 5-ORC279/2016-BHU. • No Violation

Written submission

28.9.8: PP vide letter dated 14.08.2025 has submitted the written information regarding the reduction in Ash Pond area from 80 ha to 60 Ha for proposed Darlipali STPP Stage-II expansion project and revised land use breakup as mentioned below-

S No	Description	Existing (Ha)	Area Proposed (Ha)	Total (Ha)
1	Main Plant	98.340	46.592	144.932
2	Ash Pond	160.00	60.000	220.000
	Sub Total (Plant & Ash Dyke)	258.34	106.592	364.932
3	Green Belt	110.47	39.660	150.130
	Green Belt (%) of Main Plant & Ash Dyke Area	42.76	37.21	41.14
4	Township	55.210	0	55.210

S No	Description	Existing (Ha)	Area Proposed (Ha)	Total (Ha)
5	Railway siding, MGR, Outside drains etc.	159.150	0	159.150
6	Raw water Reservoir	12.000	13.660	25.660
7	Others (Misc. areas in roads/peripher y, office/Stores, make up water pump House etc.)	80.610	0	80.610
	Total	675.780	159.912	835.692
Note: *In addition to above green belt, 1.0 lakh tree plantation shall be carried out outside project area.*				

3.3.3. Deliberations by the committee in previous meetings

N/A

3.3.4. Deliberations by the EAC in current meetings

Observations and Deliberations of the Committee

28.9.9: The Committee noted the following:

Recommendation of EAC

28.9.10 In view of the foregoing and after detailed deliberations, the committee ***recommended*** the instant proposal for grant of following amendment in ToR dated 17/04/2023 **subject to uploading of written submisisons**, as detailed below subject to stipulation of following additional specific ToRs. All Other terms and conditions prescribed in ToR dated 17/04/2023 and 13/11/2023 shall remain unchanged:

Condition no.	Details of Conditions as per TOR	Recommendations of the EAC
Subject	Expansion of Darlipali Super Coal Based T hermal Power Project by installing 1x800 MW (Stage-II) project in existing project (2 x800 MW) at village Darlipali, Taluk Leph ripara, District Sundergarh, Odisha by M/s NTPC Limited-Term of Reference (ToR)-r eg.	**Agreed to make the change in subject as menti oned below.** Expansion of 2x800 MW (Stage-I) Darlipali Supe rcritical Coal Based Thermal Power Plant by Add ition of One Unit of 800 MW [1x800MW(Stage-I I) Darlipali Super Thermal Power Project] at Vill age Darlipali, Raidihi, in Lephripara Tehsil, Villa ge Chuabahal, Kalamegha, Laikera, Bihajor, Kan aktura in Hemgir Tehsil of Sundergarh District an d Village Tileimal, Chichinda, Kechobahal, in Jh arsuguda Tehsil and Village Chhadarama in Lakh anpur Tehsil of Jharsuguda District in Odisha by M/s NTPC Limited -Term of Reference(ToR)-re g.
4 (ii)	**Water Requirement:** Quantity of water Requirement: 2400 m^3/hr Cooling System: Water Cooled condenser s ystem	**Agreed** Concerning the change in condition 4(ii) of ToR dated 17/04/2023 Committee recommended to a mend the condition no.4(ii) as follows: **Water Requirement:** Quantity of water Requirement: 930 m^3/hr Cooling System: Air Cooled condenser system

<table>
<tr><th>Condition no.</th><th>Details of Conditions as per TOR</th><th>Recommendations of the EAC</th></tr>
<tr><td>4 (ii)</td><td>Land Area Breakup<table><tr><td>Description</td><td>Existing (Ha)</td><td>Proposed (Ha)</td><td>Total (Ha)</td></tr><tr><td>Main Plant</td><td>322.534</td><td>45.3248</td><td>367.8588</td></tr><tr><td>Township</td><td>62.3216</td><td>0</td><td>62.3216</td></tr><tr><td>Ash Pond</td><td>160</td><td>80</td><td>240</td></tr><tr><td>Railway siding, corridors etc.</td><td>54.035</td><td>0</td><td>54.035</td></tr><tr><td>Green Belt</td><td>76.89</td><td>34.587</td><td>111.4776</td></tr><tr><td>Total</td><td>675.78</td><td>159.9124</td><td>835.693</td></tr></table></td><td>Agreed
Concerning the change in condition 4(ii) of ToR dated 17/04/2023 Committee recommended to amend the condition no.4(ii) as follows:
Land Area Breakup<table><tr><td>Description</td><td>Existing (Ha)</td><td>Area Proposed (Ha)</td><td>Total (Ha)</td></tr><tr><td>Main Plant</td><td>98.340</td><td>46.592</td><td>144.932</td></tr><tr><td>Ash Pond</td><td>160.00</td><td>60.000</td><td>220.000</td></tr><tr><td>Sub Total (Plant & Ash Dyke)</td><td>258.34</td><td>106.592</td><td>364.932</td></tr><tr><td>Green Belt</td><td>110.47</td><td>39.660</td><td>150.130</td></tr><tr><td>Green Belt (%) of Main Plant & Ash Dyke Area</td><td>42.76</td><td>37.21</td><td>41.14</td></tr><tr><td>Township</td><td>55.210</td><td>0</td><td>55.210</td></tr><tr><td>Railway siding, MGR, Outside drains etc.</td><td>159.150</td><td>0</td><td>159.150</td></tr><tr><td>Raw water Reservoir</td><td>12.000</td><td>13.660</td><td>25.660</td></tr><tr><td>Others (Misc. areas in roads/periphery, office/Stores, make up water pump House etc.)</td><td>80.610</td><td>0</td><td>80.610</td></tr><tr><td>Total</td><td>675.780</td><td>159.912</td><td>835.692</td></tr></table></td></tr>
<tr><td>4 (ii)</td><td>Breakup of land use of TPP Site<table><tr><td>Nature of land Involved in (Ha)</td><td>Area Existing in Ha (X)</td><td>Additional Area Proposed in Ha (Y)</td><td>Total Area require after expansion in Ha (X+Y)</td></tr><tr><td>Non-Forest Land (A)</td><td>661.830</td><td>105.049</td><td>766.88</td></tr><tr><td>Forest Land (B)</td><td>13.950</td><td>54.863</td><td>68.813</td></tr><tr><td>Total (A+B)</td><td>675.780</td><td>159.912</td><td>835.693</td></tr></table></td><td>Concerning the change in condition 4(ii) of ToR dated 17/04/2023 Committee recommended to amend the condition no.4(ii) as follows.
Breakup of land use of TPP Site<table><tr><td>Nature of land Involved in (Ha)</td><td>Area Existing in Ha (X)</td><td>Additional Area Proposed in Ha (Y)</td><td>Total Area require after expansion in Ha (X+Y)</td></tr><tr><td>Non-Forest Land (A)</td><td>622.700</td><td>94.611</td><td>717.311</td></tr><tr><td>Forest Land (B)</td><td>53.080</td><td>65.301</td><td>118.381</td></tr><tr><td>Total (A+B)</td><td>675.780</td><td>159.912</td><td>835.692</td></tr></table></td></tr>
</table>

The land and the facilities of the stage-I and the proposed stage-II project falling under the two districts namely Sundergarh and Jharsuguda District of Odisha State are as follows:

Descri -ption	STAGE-I (2X800 MW)- EXISTING				STAGE-II(1X800 MW)- PROPOSED							
	Existing (Ha)	District	Tehsil	Village	Area Already acquired (Ha)	District	Tehsil	Village	Area to be acquired (Ha)	District	Tehsil	Village
Main plant	98.340	Sundar -garh	Lephri -pada	Darli -pali	26.812	Sundar -garh	Lephri -pada	Darli -pali	19.780	Sundar -garh	Lephri -pada	Darli -pali
Township	55.210	Sundar -garh	Lephri -pada	Darli -pali	--	--	--	--	--	--	--	--
Ash pond	160.000	Sundar -garh	Lephri -pada	Darli -pali	12.460	Sundar -garh	Lephri -pada	Darli -pali	22.922	Sundar -garh	Lephri -pada	Darli -pali
									24.618	Jharsu -guda	Jharsu -guda	Tilei -mal
Railway siding, MGR, Outside drains etc.	150.250	Sundar -garh	Lephri -pada	Darli -pali, Raidihi	--	--	--	--	--	--	--	--
			Hemgir	Chua -bahal, Kala -megha, Laikera, Bihajor, Kanaktura								
	8.900	Jharsu -guda	Jharsu -guda	Chich -inda, Kecho -bahal	--	--	--	--	--	--	--	--
Raw water reservoir	12.000	Sundar -garh	Lephri -pada	Darli -pali	--	--	--	--	13.660	Sundar -garh	Lephri -pada	Darli -pali
Others (Misc. ar	77.480	Sundar	Lephri	Darlipali	--	--	--	--	--	--	--	--

Descri -ption	STAGE-I (2X800 MW)- EXISTING				STAGE-II(1X800 MW)- PROPOSED							
	Existing (Ha)	District	Tehsil	Village	Area Already acquired (Ha)	District	Tehsil	Village	Area to be acquired (Ha)	District	Tehsil	Village
eas in roads/periphery, office/Stores, make up water pump House etc.)		-garh	-pada									
	3.130	Jharsu -guda	Lakhan -pur	Chhadarama	--	--	--	--	--	--	--	
Green Belt	110.470	Sundar -garh	Lephri -pada	Darlipali, Raidihi	--	--	--	--	25.250	Sundar -garh	Lephri -pada	Darli -pali
									14.410	Jharsu -guda	Jharsu -guda	Tilei -mal
District wise total land	663.75	Sundar -garh			39.272	Sundargarh			81.612	Sundar -garh		
	12.030	Jharsu -guda							39.028	Jharsu -guda		
Total (Ha)	675.78				39.272				120.64			
Grand Total (Ha)	**675.78**				**159.912**							

3.3.5. Recommendation of EAC

Recommended (Subject to submission of requisite information/ documents)

3.3.6. Details of Terms of Reference

3.3.6.1. Specific

Additional Specific ToRs

1.	Proponent shall submit action plan for carrying out 1.0 lakh additional tree plantation outside the project site as committed in addition to the prescribed 33% of the total plant area. The details of the area outside the project site, acquisition status, criteria for monitoring of green belt development shall also be submitted.
2.	PP shall also adopt Miyawaki plantation technique and plantation with minimum 2 meter height of the saplings in upcoming monsoon season.
3.	Project proponent shall submit action plan for dry ash handling system for the proposed expansion project and detail shall be submitted.
4.	Stage I FC (or) status of stage I FC 65.301 ha of forest land shall be submitted as per the MoEF&CC O.M. dated 9/09/2011 & its amendment.

3.4. Agenda Item No 4:

3.4.1. Details of the proposal

EXPANSION BY ADDITION OF 2x800 MW (1600 MW) COAL BASED ULTRA SUPER CRITICAL THERM AL POWER PLANT TO EXISTING 2 x 630 MW (1260 MW) MB POWER (MADHYA PRADESH) LIMITED AT VILLAGE LAHARPUR, MURRA, GUWARI, BELIA & JETHARI, IN JAITHARI TEHSIL, ANUPPUR DI STRICT, MADHYA PRADESH by **MB POWER (MADHYA PRADESH) LIMITED** located at **ANUPPUR,MAD HYA PRADESH**

Proposal For		Fresh EC	
Proposal No	**File No**	**Submission Date**	**Activity (Schedule Item)**
IA/MP/THE/540868/2025	J-13012/99/2008-IA.II(T)	23/07/2025	Thermal Power Plants (1(d))

3.4.2. Project Salient Features

Agenda No: 28.10

28.10: Proposed Expansion by addition of 2x800 MW (1600 MW) Coal Based Ultra Super Critical Thermal Power Plant to existing 2x630 MW (1260 MW) by **M/s. MB power (Madhya Pradesh) Limited** located at village Laharpur, Murra, Guwari, Belia & Jethari, in Jaithari Tehsil, **Anuppur District, Madhya Pradesh - Environmental Clearance-regarding.**

[Proposal no. IA/MP/THE/540868/2025, F.No. J-13012/99/2008-IA. II(T)]

28.10.1: M/s. MB Power (Madhya Pradesh) Limited has made an online application vide proposal no. IA/MP/THE/540868/2025 Dated 23/07/2025 along with copy of EIA/EMP report, Form and Certified compliance report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at item no. ***1(d)*** **Under Category "A"** of the schedule of the EIA Notification, 2006 and attracts general condition and appraised at Central Level.

Name of EIA consultant: M/s Greencindia Consulting Limited [S. No. NABET/EIA/2326/RA 0297 List of ACOs with their Certificate / Extension Letter no QCI/NABET/ ENV/ACO/ 23/2862; Valid up to 22.02.2026].

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

28.10.2: The proposed project is for expansion of existing project of M/s MB Power (Madhya Pradesh) Limited from 1,260 MW (2x630 MW) to 2,860 MW with addition of 2 Units of 800 MW each (2x800 MW) located in Laharpur, Murra, Guwari, Belia & Jaithari Village, Jaithari Tehsil, Anuppur District, Madhya Pradesh.

28.10.3: The Environment Clearance for 2 x 600 MW in the name of M/s. Moser Baer Power & Infrastructure Limited was obtained vide letter no. J-13012/99/2008-IA.II(T) dated 28.05.2010. Corrigendum in EC was issued dated 01/09/2010 w.r.t involvement of forest land and its diversion.

Forest Clearance details

For 37.875 ha (93.6 acres) forest land coming under revenue forest land

- Stage 1 – Vide letter no. 6MPCo51/2009-BHO/1032 dated 04.06.2010.

- Stage 2 – Vide letter no. 6MPC051/2009-BHO/3598 dated 17.08.2011.
- Transfer of EC - From "M/s Moser Baer Power & Infrastructure Ltd.," to "M/s. MB Power (Madhya Pradesh) Ltd" vide letter no. J-13012/99/2008-IA.II(T) dated 23.11.2010.

Thereafter, Environment Clearance (Under clause 7(ii)(a)) -obtained for 2 x 630 MW in the name of M/s MB Power (Madhya Pradesh) Ltd. vide letter no. J-13012/99/2008-IA.II(T) dated 07.05.2024. Consent to Operate (CTO) for the existing unit was accorded by Madhya Pradesh State Pollution Control Board vide lr. No. AW-61310 dated 05.11.2024. The validity of CTO is up to 31.03.2026.

28.10.4: Implementation status of the existing ECs dated 28/05/2010 & 07/05/2024

S. No.	Configuration	Capacity (MW)	As per EC da ted	Implementation Statu s as on 28.07.2025	Production as per CTO
1	2x630	1260	28.05.2010 an d 07.05.2024	Project is operational f or complete componen ts/ units envisaged in t he EC	1260 MW

28.10.5: Certified compliance report from Regional Office: The Status of compliance of earlier EC was obtained from Regional Office, Bhopal vide letter no. 4-15/2010, dated 10.05.25 in the name of M/s M B Power (Madhya Pradesh) Limited. The Action taken report regarding the partially/non-complied conditions was submitted to Regional office, MoEF&CC, Bhopal vide letter no. MBPMPL/EHS/MoE&CC/2025-26/175 dated 25.06.2025. MoEF&CC (RO), Bhopal evaluated the same and has issued letter dated 11.07.2025. The details of the observations made by RO in the report dated 11.07.2025 along with its re-assessment / present status as furnished by the PP is given as below.

S. N o.	Non- compliances details	Observation of R O (abridged)	Condition no.			Re-assessment by RO / Response by PP
			EC date	Specif ic	Gener al	
1	The budget earm arked for the plan tation shall be ke pt in a separate ac count and audited annually. PP sho uld annually sub mit the audited st atement of expen diture along with proof of activities viz. photographs (before &after wi th geolocation da te & time), details of expert a gency engaged, d etails of species p lanted, number of species planted, s urvival rate, dens ity of plantation e tc. to the Regiona l Office of MoE F&CC and on PA RIVESH Portal a s the case may be for the activities carried out durin g previous year.	Project Proponen t submitted expe nditure statement for plantation. A udited statement is awaited. Planta tion photos are a vailable. **Partly Complied**	28.05.20 10 & 07. 05.2024	1.9		Project propone nt has engaged an organisation for environment al audit. The rep ort is to be recei ved as an audite d statement/rep ort. Hence, it is considered that compliance is in progress. **Compliance in Progress**

S. No.	Non- compliances details	Observation of RO (abridged)	Condition no.			Re-assessment by RO / Response by PP
			EC date	Specific	General	
2	A vision document comprising prospective plan for implementation of various CER activities, plantation programme outside the project cover area, rejuvenation, and conservation of water bodies within 5km radius of the project cover area, creation of sacred groves etc. shall be prepared and submitted to the Regional Office of the Ministry within 6 months. Implementation status of the same shall be reported	Vision document on the policy frame work, have been prepared. It is advised to prepare the vision document on creation of basic amenities, conservation and rejuvenation of natural resources based on the studies being conducted on water conservation and ecology/biodiversity. **Partly Complied**	28.05.2010 & 07.05.2024	2.1		Revised Vision Document incorporating the said activities is submitted. PP has to submit the implementation status in subsequent six-monthly compliance reports. **Compliance In Progress**
3	Epidemiological Study among population within 5 km radius of project cover area shall be carried out on regular interval (Once in two year) through independent agency. Necessary measures shall be taken as per findings of study in consultation with district administration. Action taken report shall be submitted to the Regional Office of the Ministry.	The documentary evidence shows that consultant has been engaged vide their service order dated 13.02.2025. Accordingly, it is observed that the study is under progress. **Partly Complied**	28.05.2010 & 07.05.2024	2.2		EMTRC Consultants LLP (March, 2025) is submitted. PP has to implement the recommendations and its implementation status to be reported in subsequent six-monthly compliance reports. **Compliance In Progress**
4	The recommendation from Standing Committee of NBWL under the Wildlife (Protecti	Based on the report of DFO vide letter dated 29.01.2024, the condition **is not applica**	28.05.2010 & 07.05.2024		1.6	Approved Wildlife Conservation Plan by PCCF (Wildlife, Bhopal) is submitted.

S. No.	Non- compliances details	Observation of RO (abridged)	Condition no.			Re-assessment by RO / Response by PP
			EC date	Specific	General	
	on) Act, 1972 should be obtained, if applicable	**ble.** **Not applicable.**				PP has to deposit the said amount with the concerned authority towards implementation of the plan and compliance status/ progress to be reported in subsequent six-monthly compliance reports. **Compliance In Progress**
5	Green belt shall be developed in an area of 33% of the total project with indigenous native tree species in accordance with CPCB guidelines. The green belt shall inter-alia cover an entire periphery of the plant.	Compliance is in progress	28.05.2010 & 07.05.2024		8.1	Approved Action plan by DFO, Anuppur is submitted. PP has to implement the action plan as per schedule and report the progress in six-monthly compliance reports. **Compliance In Progress**

In addition to the above, status of installation of Flue Gas Desulphurization has been furnished as per the MoEF&CC Notification dated 11/07/2025:

i. Categorization details of TPP: Category C

ii. Sulphur content of the coal to be fired in the boiler: will be <0.5%

iii. Status of FGD installation for existing unit:

- Wet lime stone based FGD has been installed in existing 2x630 MW Units. The design condition for SOx emission at FGD outlet is less than 200 mg/Nm^3. A wet chimney has been installed at FGD outlet. FGD system is equipped with CEMS.
- Unit-1 FGD has been commissioned in March'24
- Unit-2 FGD has been commissioned in May'24
- Both the FGDs are under operation.

iv. Action plan for installation of new stack in compliance to the notification number GSR 742 (E) dated the 30/08/1990 for the proposed expansion. A 275 m height Chimney will be constructed. Construction shall commence during FY '26 and expected completion by FY'29. The Chimney shall be in compliance to the notification number GSR 742 (E) dated the 30/08/1990 as per the notification dated 11/07/2025.

28.10.6: **The detail of the ToR is furnished as below:**

Proposal No. and date	Consideration	Details	Date of accord	ToR Validity
IA/MP/THE/502449/2024	16th meeting of EAC – Thermal held on 12.12.2024	Terms of Reference	28.12.2024	28.12.2028

28.10.7: **Environmental site settings:**

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>1.</td><td>Total land</td><td>451.202 Ha [Private: 346.379; Govt.: 66.948 Ha; Forest Land: 37.875 Ha]</td><td></td></tr>
<tr><td>2.</td><td>Land use break up</td><td>
<table>
<tr><th>Facilities</th><th>Area for 2x630 MW - PH-1 (In Ha)</th><th>Area for 2 x800 MW - PH-2 (In Hectares)</th><th>Total Area for - PH-1 & PH-2 (In Ha)</th></tr>
<tr><td colspan="4">I. Land available within existing plant boundary</td></tr>
<tr><td>Plant Area</td><td>109.717</td><td>69.506</td><td>179.223</td></tr>
<tr><td>Reservoir</td><td>44.534</td><td>8.98</td><td>53.514</td></tr>
<tr><td>Ash Pond</td><td>6.68</td><td>7.692</td><td>14.372</td></tr>
<tr><td>Green belt (main plant)*</td><td>102.637</td><td>41.529</td><td>144.166</td></tr>
<tr><td>Misc infrastructure</td><td>8.097</td><td>2.024</td><td>10.121</td></tr>
<tr><td>Colony</td><td>16.599</td><td>0</td><td>16.599</td></tr>
<tr><td>Sub Total area within plant boundary - A</td><td>288.264</td><td>129.731</td><td>417.996</td></tr>
<tr><td colspan="4">II. Additional Area</td></tr>
<tr><td>Land for future use</td><td></td><td>11.579</td><td>11.579</td></tr>
<tr><td>Area for Railway line</td><td></td><td>14.462</td><td>14.462</td></tr>
<tr><td>Green belt along railway line*</td><td></td><td>7.166</td><td>7.166</td></tr>
<tr><td>Sub Total area outside plant boundary - B</td><td></td><td>33.207</td><td>33.207</td></tr>
<tr><td>Total area for Phase-I & Phase-II - (A+B)</td><td colspan="3">451.202</td></tr>
</table>
</td><td></td></tr>
<tr><td>3.</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014 & 19/02/2025</td><td>Total land- 451.202 Ha
Non Forest land – 413.327 Ha
Forest Land- 37.875 Ha.
The Stage I & II forest clearance was granted vide letter no.- 6-MPCO51/2009- BHO/1032 & 6-MPC051/2009-BHO/3598, Dated 17.08.2011</td><td>417.996 Ha is within plant boundary. 33.206 Ha is proposed for expansion and same has been acquired. Land mutation documents for the said parcel of land is uploaded on Parivesh Portal.</td></tr>
<tr><td>4.</td><td>Existence of habitation & involvement of R&R, if any.</td><td><u>Project site</u>: Guwari
Study Area:
<table>
<tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Guwari</td><td>0.25 km</td><td>North</td></tr>
<tr><td>Murra</td><td>0.21 km</td><td>East</td></tr>
</table>
Mitigation measures adopted are as follows.
• Plantation in consultation will village panchayets.
• Periodical (minimum Quarterly) health checkups.
• Facilities of primary healthcare at Jaithari with enhancement of capacity.</td><td>R&R is not required.</td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>• Providing free medicines during health camps (seasonally)
• Provision of Safe drinking water in educational facilities (Schools) present in these villages.</td><td></td></tr>
<tr><td>5.</td><td>Existence of school and hospitals if any.</td><td>A. School
Project site: School name: Paramount Academy Eng. Med. Higher Secondary School
Study Area:
<table>
<tr><th>School</th><th>Distance</th><th>Direction</th></tr>
<tr><td>School name: Paramount Academy Eng. Med. Higher Secondary School</td><td>1.6 km</td><td>South-East</td></tr>
</table>
B. Hospital
Project site: Hospital name: Guwari CHSC
Study Area:
<table>
<tr><th>Hospital</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Guwari CHSC</td><td>0.58 km</td><td>North West</td></tr>
</table>
Mitigation measures adopted are as follows.
• FGD and De NOx is already installed for the existing plant.
• Green Belt is present towards the East direction, and it is proposed to densify the existing green belt to 20 m width during the phase II. The greenbelt will be upgraded by planting additional air-purifying trees such as neem, banyan, and peepal in a dense green belt (thickness of green area 20m) between the power plant and the school to absorb pollutants and act as a dust barrier and noise barrier.
• A dedicated AAQ station near school to monitor PM_{10}, $PM_{2.5}$, SO_2 and NOx will be set up.
• Plantation will be taken up by MB power (Madhya Pradesh) Limited along the boundary of the school which will be further act as barrier.</td><td></td></tr>
<tr><td>6.</td><td>Latitude and Longitude of all corners of the project site.</td><td>A. Plant site
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>23°4'26.01"N</td><td>81°46'24.16"E</td></tr>
<tr><td>B</td><td>23°4'33.83"N</td><td>81°46'43.33"E</td></tr>
<tr><td>C</td><td>23°4'31.71"N</td><td>81°47'5.72"E</td></tr>
<tr><td>D</td><td>23°4'18.91"N</td><td>81°47'26.59"E</td></tr>
<tr><td>E</td><td>23°4'31.21"N</td><td>81°47'47.48"E</td></tr>
<tr><td>F</td><td>23°4'42.33"N</td><td>81°48'0.23"E</td></tr>
<tr><td>G</td><td>23°4'34.40"N</td><td>81°48'21.17"E</td></tr>
<tr><td>H</td><td>23°4'15.43"N</td><td>81°48'20.61"E</td></tr>
<tr><td>I</td><td>23°04'1.40"N</td><td>81°48'17.87"E</td></tr>
<tr><td>J</td><td>23°3'53.38"N</td><td>81°48'0.61"E</td></tr>
<tr><td>K</td><td>23°3'48.83"N</td><td>81°47'36.15"E</td></tr>
<tr><td>L</td><td>23°3'39.39"N</td><td>81°47'24.95"E</td></tr>
<tr><td>M</td><td>23°3'29.16"N</td><td>81°47'45.76"E</td></tr>
<tr><td>N</td><td>23°3'15.58"N</td><td>81°47'33.29"E</td></tr>
<tr><td>O</td><td>23°3'14.09"N</td><td>81°47'26.06"E</td></tr>
<tr><td>P</td><td>23°3'25.63"N</td><td>81°47'17.5"E</td></tr>
<tr><td>Q</td><td>23°3'34.11"N</td><td>81°47'8.316"E</td></tr>
<tr><td>R</td><td>23°3'41.08"N</td><td>81°46'48.34"E</td></tr>
<tr><td>S</td><td>23°3'54.51"N</td><td>81°46'41.47"E</td></tr>
</table></td><td></td></tr>
</table>

28.10.8 The unit configuration and capacity of existing *and* proposed project is given as below:

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>T</td><td>23°04'4.27"N</td><td>81°46'27.95"E</td></tr>
<tr><td>U</td><td>23°4'11.78"N</td><td>81°46'20.91"E</td></tr>
<tr><td>V</td><td>23°4'20.39"N</td><td>81°46'21.72"E</td></tr>
</table>
B. Area outside the project site
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>I</td><td>23°3'47.38"N</td><td>81°48'52.42"E</td></tr>
<tr><td>II</td><td>23°3'48.71"N</td><td>81°49'09.96"E</td></tr>
<tr><td>III</td><td>23°3'39.16"N</td><td>81°49'13.33"E</td></tr>
<tr><td>IV</td><td>23°3'38.05"N</td><td>81°48'59.32"E</td></tr>
<tr><td>V</td><td>23°3'40.99"N</td><td>81°48'51.94"E</td></tr>
</table>
</td><td></td></tr>
<tr><td>7.</td><td>Elevation of the project site</td><td>502 M above mean sea level</td><td></td></tr>
<tr><td>8.</td><td>Involvement of Forest land if any.</td><td>Status of Stage I & II Forest Clearance: The forest clearance was granted vide letter no.- 6-MPCO51/2009- BHO/ 1032 Dated 04.06.2010 & 6-MPC051/2009- BHO/3598, Dated 17.08.2011
Area of the forest land involved: 37.875 Ha</td><td></td></tr>
<tr><td>9.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td>Project site:
Name: Nala diversion within plant boundary (350 m approx.)
Approval for proposed Nala diversion (350m approx.) has been obtained from WRD, Anuppur dated 25/10/2024.
Study area
<table>
<tr><td>Water body</td><td>Distance</td><td>Direction</td></tr>
<tr><td>Kiranr Nala</td><td>1</td><td>WSW</td></tr>
<tr><td>Tipan Nadi</td><td>1.6</td><td>WSW</td></tr>
<tr><td>Hansia Nala</td><td>Hansia Nala</td><td>Hansia Nala</td></tr>
<tr><td>Son River</td><td>4.7</td><td>NE</td></tr>
<tr><td>Koylar Nala</td><td>5</td><td>S</td></tr>
</table>
Plant site is at higher elevation (502 m) than the HFL of Tipan River (499m)</td><td>HFL for the Tipan River is 499 m vide WRD Letter dated: 19.11.2024. Distance from project site is 1.5 km approximately. There were no flooding incidents in Tipan River for the past 30 years.</td></tr>
<tr><td>10.</td><td>Existence of ESZ/ESA/ National park / wildlife sanctuary / biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area</td><td>Study area: Nil
Name of the ESZ/ESA:NA
Status of Notification:NA
Distance of project from ESZ/ESA: NA Authenticated map of ESZ projecting distance of ESZ from project site: Status of NBWL approval: Not Required
List of Reserved and protected forests:
<table>
<tr><th>Name</th><th>Distance in Km</th><th>Direction</th></tr>
<tr><td>Lakhanpur RF</td><td>0.127</td><td>SE</td></tr>
<tr><td>RF</td><td>1.8</td><td>SE</td></tr>
<tr><td>Lakhanpur RF</td><td>2</td><td>SSW</td></tr>
<tr><td>Mauhari RF</td><td>2</td><td>NE</td></tr>
<tr><td>2 RF</td><td>3.5</td><td>S</td></tr>
<tr><td>Mauhari RF near Mahuari</td><td>3.6</td><td>NW</td></tr>
</table>
</td><td>NO Eco-sensitive Zone notified/ proposed to be notified are within the 10 km study area.</td></tr>
</table>

S. No.	Particulars	Details	Remarks
		2 RF — 5 — NE Kotma RF near Kukurgora — 5.5 — NNE Maikala RF — 5.8 — SW 2 Kotma RF Rahilakachhar — 5.9 — ENE Dahnadawra RF — 6.9 — S 5 PF, 1 RF — 8.1 — SE 2 PF — 8.2 — SSE Kotma RF near Kukurgora — 8.7 — ENE Lakhanpur RF — 8.7 — WSW Mauhari RF near Bholgar — 9.7 — NW Nigaura RF — 10.4 — SE Rampur RF — 10.7 — N Sulkhari RF — 12.2 — SSE Munda RF — 12.5 — SE Maikala RF — 12.8 — WSW Bamni PF — 13.1 — NNE Jareli RF — 13.3 — SE RF, PF — 13.6 — SE	
11.	Archaeological sites monuments/ historical temples etc.	No Archaeological sites/ monument/ historical temples are present in the project site.	
12.	Involvement of Critically Polluted Area/ Severely Polluted area as per 2018 CEPI score	Involvement of CPA/SPA: Nil Proximity to CPA/SPA: NA	

S. No.	Existing power plant configuration and capacity	Proposed power plant configuration and capacity	Total	Technology adopted
1	2x630 MW	2x800 MW	2860 MW	Existing - Sub critical Proposed - Ultra Super Critical Thermal Power Plant

28.10.9: The details of the fuel (coal/gas/LDO) requirement for the proposed project/ expansion cum proposed project along with its source and mode of transportation is given as below:

Details	Fuel requirement (MTPA)	Source	Distance from site (Kms)	Mode of Transportation	Coal characteristics (Worst case scenario)	Linkage document
Existing TPP	6.17 MM TPA	SECL Coal Fields	250 km	Railway Siding	Ash - 39% Sulphur - < 0.5% Moisture- 15% GCV – 3364 Kc	The coal supply agreement between SECL Coal field

Details	Fuel requ irement (MTPA)	Source	Distance from site (Kms)	Mode of Tra nspo rt ation	Coal characterist ic s (Worst case scenar io)	Linkage doc ument
					al/Kg	and MBPMP L for 389330 9 Tonnes coa l has be acqui red for Existi ng TPP
Proposed TPP	7.36 MM TPA	The coal will be s ourced f rom CIL mines	250 km	Railway Si ding	Ash – 39% Sulphur - < 0.5% Moisture - 15% GCV- 3200 – 3 800 Kcal/Kg-	

28.10.10: Water requirement: Existing Water requirement is 68,400 m^3/day and it is obtained from Son River and permission for the same has been obtained from WRD, Govt. of Madhya Pradesh vide letter dated 16.05.2018. The water requirement for the proposed project is estimated as 1,08,000 m^3 /day, out of which 95,808 m^3/day of fresh water requirement will be obtained from the Son river and the remaining requirement of 12,192 m^3 /day will be met from the treated water from the plant. The permission for drawl of groundwater / surface water is obtained from WRD, Govt of Madhya Pradesh Dated 25-102024. The water will be transported to the plant site through Pipeline.

28.10.11: Power requirement: Existing power requirement of 75.6 MW (Aux. power approx. 6 %) is obtained from Phase I (2×600MW) The power requirement for the proposed project is estimated as 96 MW, which will be obtained from the Phase II(2×630MW).

28.10.12: Baseline Environmental Studies

Period	October, November & December 2024 (Post Monsoon)	Additional study (if any)
AAQ parameters at 9 Locations (mi n and max)	$PM_{2.5}$ = 23.59 µg/m^3 to 42.04 µg/m^3 PM_{10} = 52.44 µg/m^3 to 76.23 µg/m^3 SO_2 = 9.43 to16.66 µg/m^3 Nox = 13.53 to 19.86 µg/m^3	
	PM_{10} =1.56 µg/m^3 (Level at 1.2 km in SSE Direction) SO_2 = 37 µg/m^3 (Level at 1.2 km in SSE Direction) Nox = 5.20 µg/m^3 (Level at 1.2 km in SSE Direction)	
Ground water qua lity at 07 locations	pH: 6.78 to 7.54, Total Hardness: 132.11 to 276.22 mg/l, Chloride s: 32.04 to80.1 mg/l, Fluoride: 0.18 to 0.31 mg/l. Heavy metals lik e Cadmium, Chromium, Iron, Copper, Lead Mercury were found t o be below detection limits. Iron in the range of 0.11 to 0.27.	
Surface water qua lity at 10 locations	pH: 6.81 to 7.71; DO: 6.5 to 7 mg/l and BOD: <2 to 6.2 mg/l. CO D from < 10 to 16.2 mg/l. Heavy metals like Cadmium, Chromiu m, Iron, Copper, Lead Mercury were found to be below detection l imits. Iron in the range of 0.14 to 0.3. Coliform was absent in Grou nd water samples.	
	Effluent generation from TPP- 12,192 KLD Mode of treatment & reuse- ETP of Capacity 12,200 KLD Domestic wastewater generation – 55.2 KLD Mode of treatment & reuse- STP/ETP - STP of Capacity 130 KLD. Zero liquid discharge will be adopted.	
Noise levels Leq (Day and Night)	51.4 dB(A) to 62.4 dB(A) for the daytime and 42.2 dB(A) to53.1 dB(A) for the Nighttime.	
	•Traffic study has been conducted at Pendra Road which is approx	Number of HCVs (Trail

<table>
<tr><th>Period</th><th>October, November & December 2024 (Post Monsoon)</th><th>Additional study (if any)</th></tr>
<tr><td></td><td>imately 0.3 km (distance) from the plant site.
•Transportation of raw material will be done 100 %. by rail.
•Existing PCU is 116.8 PCU/hr on Pendra Road and existing le vel of service (LOS) is: A
•PCU load after proposed project will be 116.8 (Existing) + 19.8 (Additional) PCU/hr and level of service (LOS) will be: A
<table>
<tr><th>Road</th><th>V (Volume in P CU/hr.)</th><th>C (Capacity in PCU/hr.)</th><th>Existing V/ C Ratio</th><th>LOS</th></tr>
<tr><td>Pendra Road</td><td>116.8</td><td>625</td><td>0.1868</td><td>A</td></tr>
</table>
* Note: Capacity as per IRC 064-1990 Guideline for capacity for roads.
<table>
<tr><th>Road</th><th>V (Volume in P CU/hr.)</th><th>C (Capacity in PCU/hr.)</th><th>Proposed V/C Ratio</th><th>LOS</th></tr>
<tr><td>Pendra Road</td><td>136.6</td><td>625</td><td>0.218</td><td>A</td></tr>
</table>
Conclusion: The level of service will remain same i.e., A: Co ndition of free flow after including additional traffic due to propo sed project.</td><td>er and Bulkers) used for transportation of Ash ar e- 138- 145/ day. The tr ansportation route used for the bulkers to transp ort ash is via Pendra roa d. The traffic study con ducted for the baseline was on Pendra road and the trucks were include d in the study. The Leve l of Service of the Pendr a Road will remain ‘A’ in free flow state.
Additional Traffic Impa ct Assessment was cond ucted by EMTRC Cons ultants LLP. The report showed that the concent ration of CO and NOx will increase significant ly if transported by roa d. To mitigate the predi cted results, Fly ash tran sportation will be prima rily through railways. In this regard 4 Nos of silo s are being constructed f or loading the fly ash in to railway wagons for tr ansportation to cement plants. Approximately 8 0% reduction in road tra nsport of ash is expecte d. This will reduce the r oad transportation of as h which in terms will re duce the emission load.</td></tr>
<tr><td>Soil Quality at 8 Locations</td><td>Bulk density: 1.22 to 1.41 gm/cm^3; pH range 7.36 to 7.81; Electric al conductivity (EC); 112 to 210 µmhos/cm; calcium content: 48. 71 to 67.26 mg/kg; potassium: 92.1to 205.4 kg/ha; Nitrogen: 1 24.26 to 244.8kg/ha; Phosphorous: 26.48 to 47.26kg/ha Cation Exchange Capacity (CEC): 11.2 to 15.4 meq/100gm; Magn esium: 18.26 to 34.81mg/kg; Organic Carbon: 0.51 to 1.02 %</td><td></td></tr>
<tr><td></td><td>Floral Study: During the survey, an inventory of the various plant groups discovered in the study region was created. 19 Near Threat ened species, 24 vulnerable species, 7 Endangered species & 2 Cr itically Endangered species were identified in the study area. In th e research region, 192 species of flora were identified. Out of whi ch 85 species of trees and small trees,19 species of Grasses, 29 sp ecies of Climbers, 24 species of Shrubs & 36 species of Herbs ha ve been recorded in the study area based on primary observation a s well as based on information collected from the secondary data.
Faunal Study: Schedule-I species were found during the field surv ey within 10 km radius of the plant site. Though in public consult</td><td>The Wildlife Cons ervation plan was approved by PCC F, Madhya Prades h vide letter no- . / . . .-1/Mine-230/51 13 dated 12.06.20 25</td></tr>
</table>

<table>
<tr><th>Period</th><th>October, November & December 2024 (Post Monsoon)</th><th>Additional study (if any)</th></tr>
<tr><td></td><td>ation mention of multiple Schedule I species like Elephant, Jackle Leopard were mentioned. A number of faunal terrestrial species c omprising mammals, avi fauna, reptiles, Amphibians & fishes we re recorded from the study area. Among fauna, 26 species of mam mals, 81 species of avi fauna, 45 species of reptiles, 23 species of amphibians & 14 species of fishes were recorded from the study a rea.</td><td></td></tr>
<tr><td></td><td>Recommendations of Hydrogeology study:
<table>
<tr><th>S. No.</th><th>Activity Description</th><th>Quantity</th><th>Implementation Steps & Monitoring Responsibility</th><th>Tentative time Period</th></tr>
<tr><td>1</td><td>Afforestation in identified area in the Bank of Son River</td><td>4 Ha</td><td>Environmental Cell and project team</td><td>within 5 years</td></tr>
<tr><td>2.</td><td>Groundwater recharge and water conservation measures: Farm ponds, recharge pits, trenching, check & stop dams</td><td>4 Nos. Farm ponds
4 Nos recharge pits
7 Nos check dams
2 Nos stop dams</td><td>Hydrogeologist and project team</td><td>Item mentioned under a & b within 3 years
Item mentioned under c & d within 4 years</td></tr>
<tr><td>3</td><td>HDPE/LDPE lining in ash ponds areas and Construction of embankments and leachate collection systems to prevent groundwater contamination</td><td>Ash pond and handling area</td><td>Hydrogeologist and project team</td><td>During construction of ash pond (4 years)</td></tr>
<tr><td>4</td><td>Groundwater quality monitoring of common parameters: heavy metals, TDS, and pH etc.</td><td>4 times a year</td><td>Environmental Cell and project team</td><td>Quarterly</td></tr>
<tr><td>5</td><td>Implementation of Other required measures to prevent environmental pollution, if any.</td><td>According to requirement</td><td>Environmental Cell and project team</td><td>Time- to- time based on requirement.</td></tr>
</table></td><td>The Hydrology and Hydrogeological study were conducted by M/s. Centre for Ground Water Recharge in association with Department of Hydrology, IIT Roorkee.</td></tr>
<tr><td></td><td>The analysis of the survey data reveals that 33 species are in Schedule I of the Wildlife Protection Act of India. Out of theses 33 species, animal classes are distributed among Mammals 14, 2 Bird</td><td>Biodiversity analysis study conducted by Indira Gan</td></tr>
</table>

<table>
<tr><th>Period</th><th>October, November & December 2024 (Post Monsoon)</th><th>Additional study (if any)</th></tr>
<tr><td></td><td>s, 16 Reptiles and 1 Amphibian. Action plan along with Rs 1.16 Cr is allocated for conservation of Biodiversity of the area.
Recommendations of study report:
<table><tr><th>S. No.</th><th>Activity</th><th>Estimated Budget (INR Lakhs)</th></tr><tr><td>1</td><td>Habitat Restoration (Afforestation & Grassland Development)</td><td>15</td></tr><tr><td>2</td><td>Wildlife Monitoring & Camera Traps</td><td>11</td></tr><tr><td>3</td><td>Human-Wildlife Conflict Mitigation (Fencing, Awareness Camps)</td><td>13</td></tr><tr><td>4</td><td>Anti-Poaching & Patrolling Measures</td><td>10</td></tr><tr><td>5</td><td>Community Engagement & Livelihood Support (Eco-tourism, Agroforestry)</td><td>12</td></tr><tr><td>6</td><td>Capacity Building & Training (Forest Guards, Local Youth)</td><td>5</td></tr><tr><td>7</td><td>Water Resource Management (Pond Creation, Check Dams)</td><td>12</td></tr><tr><td>8</td><td>Conservation Education & Awareness Campaigns</td><td>7</td></tr><tr><td>9</td><td>Biodiversity Corridor Development</td><td>10</td></tr><tr><td></td><td>Total</td><td>95</td></tr><tr><td>10</td><td>Escalation cost & unforeseen expenditure (20% of Estimated Cost)</td><td>19</td></tr><tr><td>11</td><td>Miscellaneous Administration & monitoring Expenses (2% of Estimated Cost)</td><td>1.9</td></tr><tr><td>12</td><td>Total Estimated Budget</td><td>115.9 Lakhs (1.16 Cr.)</td></tr></table></td><td>dhi National Tribal University, Amarkantak.</td></tr>
<tr><td></td><td>Recommendations of Risk assessment report with mitigation measures
The preliminary risk assessment has been completed for the proposed power plant and associated facilities and the broad conclusions are as follows:
•There will be no significant community impacts or environmental damage consequences; and
•The hazardous event scenarios and risks in general at this facility can be adequately managed to acceptable levels by performing the recommended safety studies as part of detailed design, applying recommended control strategies and implementing a Safety Management System.
<u>Risk Reduction Opportunities</u>
•Buildings and plant structures designed for cyclone and seismic events (where appropriate),
•Provision for adequate water capacity to supply fire protection sy</td><td>Greencindia Consulting Pvt. Ltd, Ghaziabad.</td></tr>
</table>

Period	October, November & December 2024 (Post Monsoon)	Additional study (if any)
	stems and critical process water; •Isolate people from load carrying/mechanical handling systems, vehicle traffic and storage and stacking locations; •Installation of fit-for-purpose access ways and fall protection sys tems to facilitate safe access to fixed and mobile plant; •Provision and integrity of process tanks, waste holding tanks and bunded areas as per relevant standards; •Containment of hazardous materials; Security of facility to prevent unauthorized access to plant, introd uction of prohibited items, and control of onsite traffic; and Deve lopment of emergency response management systems commensu rate with site specific hazards and risks (fire, explosion, rescue an d first aid).	

28.10.13: Solid and hazardous waste management: The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal	Remarks
1	STP Sludge	STP	1.25	As per MoEF&CC Norms	Via Authorized vendors	
2	ETP Sludge	ETP	2	As per MoEF&CC Norms	Via Authorized vendors	
3	Fly & Bottom Ash	Boilers	3194028	As per MoEF&CC Norms	Via Authorized vendors	
4	Mill reject	Plant Process	7200	As per MoEF&CC Norms	Via Authorized vendors	
5	Municipal Solid Waste	Canteen, working zone, colony	360.9	As per MoEF&CC Norms	Via Authorized vendors	
6	Packing Material	Plant & Colony	3	As per MoEF&CC Norms	Via Authorized vendors	
7	Electrical and Electronic gadgets	Plant	1	As per MoEF&CC Norms	Via Authorized vendors	
8	Batteries	Plant	2.5	As per MoEF&CC Norms	Via Authorized vendors	
9	BMW	OHC/Clinic	0.2	As per MoEF&CC Norms	Via Authorized vendors	
10	Discarded containers	Plant process	0.5	Through authorized recycler/ CTSDF		

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal	Remarks
11	Used and waste Oil	Plant process	10	Through authorized recycler/ CTSDF		
12	Chemical sludge from waste water treatment	Plant process	25	Coprocessing, CTSDF, Preprocessing		
13	Contaminated cotton rages, cleaning material	Plant process	2	Coprocessing, CTSDF, Preprocessing		
14	Waste or residues containing oil	Plant process	100	Coprocessing, CTSDF, Preprocessing		
15	Spent ion exchange resin containing toxic metals	Plant process	3.6	Coprocessing, CTSDF, Preprocessing, incineration in boiler		
16	Wooden scrap	Plant process	2	Through authorized recycler		

28.10.14: Public Consultation: Public hearing for the proposed 2x800 MW (Phase - II) project was carried out on 07.05.2025 at Government College, Village Laharpur, Tehsil Jaithari, District- Anuppur (M.P.) in the presence of Regional Officer MPPCB & Mr. Dilip Kumar Panday, Additional Collector, Anuppur District, Madhya Pradesh. Advertisement for the same was published on 06.04.2025. The action plan and budget earmarked to address the public needs highlighted during public hearing held on 07.05.2025 is as below:

1.	Details of advertisement given	06.04.2025
2.	Date of public consultation	07.05.2025
3.	Venue	Government College, Village Laharpur, Tehsil Jaithari, District- Anuppur (M.P.) at 11.00 a.m.
4.	Presiding Officer	Mr. Mukesh Shrivastava, Regional Officer MPPCB & Mr. Dilip Kumar Panday, Additional Collector, Anuppur District, Madhya Pradesh.
5.	Major issues raised	Major issues raised during the PH were related to livelihood for elderly citizens and widows as agreed rehabilitation policy, Demand of employment, construction of community hall in nearby village, water supply and improvement in educational facilities, dust pollution, development of sports infrastructure, installation of streetlights, Pond deepening to assist in irrigation for the village, Development of medical/Health facilities, etc.

Action Plan as per MoEF&CC O.M dated 30/09/2020

		1st Year	2nd Year	3rd Year	4th Year	5th Year	(Rs. In Crores)	
A.	**Educational Initiatives**							
1	Education and drinking water Programs in Kyontar (**Support Class Program)**	0.372	0.372	0.372	0.385	0.385	**1.886**	Offering **free coaching classes** for students in **grades 3 to 7**, with a strong focus on **Foundational Literacy and Numeracy (FLN)**, in alignment with the **National Education Policy (NEP) 2020**.
2	Fee concession for students studying Bal Bharati Vidyalaya							MBPMPL confirms that: Free education upto class 12 for 2 children for each account holder. 25% discount in annual fee upto class 12 for non-account holders
3	Coaching classes for 10th and 12th class students							Coaching Classes for 10th & 12th Class students of project affected area will be started at a specially selected site during the construction period of Phase-II project.
4	Free educational materials for students studying in Amgawan Private school							Under CSR, free distribution of school bags and sanitary napkins has been done to girls studying in Private school in Amgawan.
5	Scholarship for Girl students, Kyontar							Providing scholarships to **40 girls** in **Kyontar**, covering **grades 8 to 12**. This i

		1st Year	2nd Year	3rd Year	4th Year	5th Year	(Rs. In Crores)	
								nitiative will be managed throu gh a **third-part y organization** to ensure effect ive distribution and support.
	Sub Total	**0.372**	**0.372**	**0.372**	**0.385**	**0.385**	**1.886**	
B	**Community Health Initiatives**							
6	Government to ap point one MD-Gy naecology and one MD Medicine fullt ime in CHC Jaitha ri, Whose salary w ill be borne by MB Power	0.31	0.43	0.37	0.49	0.44	**2.04**	MD Gynocolog ist – 150000 pe r month MD Medicines – 150000 per m onth
7	The patient bed ca pacity in CHC, Jai thari will be increa sed by 10% and ot her necessary infra structure will be b uilt for it.							Every year pati ent bed capacit y and required i nfrastructure wi ll be increase.
	Sub Total	**0.31**	**0.43**	**0.37**	**0.49**	**0.44**	**2.04**	
C	**Sustainable Livelihood and Women Empowerment**							
8	Skill Development Training for Youth s (Technical and N on-Technical Cour ses)	0.45	0.45	0.45	0.45	0.45	**2.25**	Vocational trai ning on various courses to 200 candidates ever y year
9	Skill Development Training on basic Sewing training an d sewing machine distribution							Vocational trai ning on basic se wing and sewin g machine distr ibution to 300 women for start their self-emplo yment.
10	Tools, Equipment, and Starter Kits fo r SHGs and Farme rs							Training and M aterial support t o 30 SHGs (app x. 450 women) every year for s tart-up small en terprises.

		1st Year	2nd Year	3rd Year	4th Year	5th Year	(Rs. In Crores)	
	Sub Total	**0.45**	**0.45**	**0.45**	**0.45**	**0.45**	**2.25**	
D	**Community Rural Infrastructure Development**							
11	Community Hall (5)	1.29	0.51	0.45	0.1	0.45	**2.8**	Five community hall construction in Laharpur, Mahuda, Chandpur, Amgawan and Dhurwasin
12	Water requirement in Kyontar							Handpump- 5 (First year - Adiwasi Basti-1, Tikri Tola-2) (Second Year - Ramsagri Tola-1, Rohila Kahar-1)
13	Road maintenance in the routes from where the Ash transportation are done							Repair and Renovation of PMGSY-BT Road from chainage 9.25 (NH-43 Junction) to 2.40 (Abandoned Stone Mine Void) at Garhi Kotma.
14	Road Repairing							From Murra to Mahuda via Takhuli (6 km)
15	Pond Deepening in village Kyontar to assist in irrigation							Pond deepening-3 Nos in Kewotar (Tedhiya Pond, Belha Pond, Jal Dahai Pond) for rain water storage for irrigation
16	Street light Installation in Laharpur village (Appx. 5 km)							Street Light (100 watt per pol) in two phases – (1) Neeraj Petrol Pump to laharpur govt. collage (Nos-50) (2) Laharpur Govt. collage to Murra village t

		1st Year	2nd Year	3rd Year	4th Year	5th Year	(Rs. In Crores)	
								urn (Nos-50)
	Sub Total	**1.29**	**0.51**	**0.45**	**0.1**	**0.45**	**2.8**	
E	**Development of Playgrounds for Sports**							
17	Improvement of Sports facility (Salary of Coach)	0.05	0.05	0.05	0.05	0.05	**0.25**	One coach to provide proper training to local youth in various sports such as - Cricket, football, volleyball badminton etc.
	Sub Total	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.25**	
F	**Community Development for various activities at village level**							
18	Plantation of trees under CSR in the premises of Schools, government buildings, institutions etc. under the project affected area.	0.02	0.02	0.02	0.02	0.02	**0.1**	Every year Plantation of 800 saplings (shed trees) within the premises of Govt. schools, Panchayat offices and institutions.
	Sub Total	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.1**	
G	**Green Belt Development**							
18	Plantation	1.84	1.84	2.3	2.3	2.3	10.58	Total 1,15000 Plant Species to be planted in five years.
	Sub Total	**1.84**	**1.84**	**2.3**	**2.3**	**2.3**	**10.58**	
	Total (A+B+C+D+E+F+G)	**4.332**	**3.672**	**4.012**	**3.795**	**4.095**	**19.906**	

28.10.15: Cost of project: Existing capital cost of the project was Rs .9000 Cr. The capital cost of the proposed project is Rs.19,200 Crores and the capital cost for environmental protection measures is proposed as Rs. 2109.5 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 46.22 Crores. The employment generation from the proposed project / expansion is 450 permanent positions. The details of cost for environmental protection measures is as follows:

S. No.	Item Description	Cost (Rs. In Crores)		
		Capital Cost	Recurring Cost	Total
1	Electrostatic Precipitator	534	11	545

S. No.	Item Description	Cost (Rs. In Crores)		
		Capital Cost	Recurring Cost	Total
2	Chimney	158.8	3.2	162
3	Aux. Cooling Towers incl. Civil Works	188.2	3.8	192
4	Ash Handling incl AWRS	225.4	4.6	230
5	Ash Dyke	23.75	1.25	25
6	Dust extraction & suppression System	8	1	9
7	DM plant waste treatment systems	58.2	1.8	60
8	Sewerage collection, treatment & disposal	1.96	0.04	2
9	Green Belt & Landscaping	10.87	0.92	11.5
10	De-NOx Control	862	18	880
11	Rainwater harvesting	5.88	0.12	6
12	Environmental Laboratory & Environmental Monitoring	11.83	0.17	12
13	CEMS, CAAQMS, EQMS monitoring system & Main gate display board	11.76	0.24	12
14	Wind Breaking wall, Dry Fog System & RCC Flooring in coal storage Area	3.92	0.08	4
15	Roof Top Solar 701.8 kWp @ 2.5 Cr/ MW	1.75	--	1.75
(Environmental Protection and Monitoring) Total in Rs in Cr		**2106.32**	**46.22**	**2152.54**
16	Carbon Sink development for 4 ha of degraded forest land	0.92	--	0.92
17	Watershed development plan	1.1	--	1.1
18	Wildlife Conservation Plan	1.16		1.16
(Additional Study) Total in Rs in Cr		**3.18**	**0**	**3.18**
Grand Total		**2109.5**		

28.10.16: Green belt development: Existing green belt has been developed in 102.637 ha area which is about 22.75% of the total project area of 451.202 ha. Additionally, 48.695 ha area shall be developed as green belt. Thus total of 151.332 ha area (33.54 % of total project area) will be developed as greenbelt. A 5 – 50 m (25 meter minimum) wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 1,19,000 saplings will be planted and nurtured in 48.695 hectares in 5 years.

28.10.17: Ash management

Year	Quantity generated (MT)	Quantity utilized (MT)	% of utilization	Balance quantity (MTP)	No of storage silos with capacity
2021-22	2184816.659	2189356.102	100.21	0	4
2022-23	2117475.21	2155390.612	101.79	0	4
2023-24	2295675.19	2311283	100.7	0	4

S.No.	Activity (as applicable)	Quantity	Percentage	Remarks (Prior approval of SPCB details to be mentioned)
1.	Fly ash based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	74184.37	1.3853	NA
2.	Cement manufacturing	2847785.01	53.18	NA
3.	Filling up of low lying area	1453920.20	27.14935359	MPPCB permission obtained.
4.	Filling of mine voids:	979332.04	18.2872704	MPPCB permission obtained.
5.	Others (please specify)	45	0.00084	NA
	Total	**5355266.62**	**100.002764**	

B. Bottom ash generation for last three years = 1242701.29T

S.No.	Activity (as applicable)	Quantity	Percentage	Remarks (Prior approval of SPCB details to be mentioned)
1.	Filling up of low lying area	819039.70	65.9080	MPPCB permission obtained.
2.	Filling of mine voids	423661.59	34.0920	MPPCB permission obtained.
	Total	**1242701**	**100**	

S.No.	Activity (asapplicable)	Quantity	Percentage	Remarks (Prior approval of SPCB details to be mentioned)
1.	Filling up of low lyingarea	10503.98	8.286218	MPPCB permission obtained.
2.	Filling of mine voids	47561.27	37.5194	MPPCB permission obtained.

	Total	**58065.25**	**45.805618**	

S.No.	**Details of Ash pond**	**Ash pond 1**	**Ash pond 2**	**Ash pon d 3**	**Total**
1.	Status of ash pond (Active / Exhauste d(yet to be reclaimed)/ Reclaimed)	Reclaimed	Active	Proposed	(Active + Propose d)
2.	Area (Ha)	14.77	6.68	7.692	14.372
3.	Dyke height (m)	17	17	17	N.A.
4.	Volume (m^3)	1291796	173445	199721	N.A.
5.	Quantity of ash disposed (Metric Tons)	1291796	73445	-	
6.	Available volume in percentage (per ce nt) and quantity of ash can be further di sposed (Metric Tons)	Nil	57.8	100	N.A.
7.	Expected life of ash pond (number o fyears and months)	N/A	30	30	N.A.
8.	Type lining carried in ash pond: HDPE lining of LDPE lining or clay lining or No lining	HDPE/ LDPE	HDPE/ LDPE	HDPE/ LDPE	N.A.
9.	Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please spec ify whether HCSD or MCSD orLCSD)	N/A	MCSD/ LCSD	MCSD/ LCSD	N.A.
10.	Ratio of ash: water in slurry mix(1:_):	N/A	30:70	30:70	N.A.
11.	Ash water recycling system (AWRS)in stalled and functioning : Yes or No	N/A	Yes	Yes	N.A.
12.	Quantity of wastewater from ash pon ddischarged into land or water body (m^3)	N/A	Nil	Nil	N.A.
13.	Last date when the dyke stability stud y was conducted and name of theorganiz ation who conducted the study:	--	Jan 2024 IIT Delhi	N.A	N.A.
14.	Last date when the audit was conducte dand name of the organization who con ducted the audit:		22-11-2024 NIT Delhi	N.A	N.A.

Details	**Existing ge neration (MTPA)**	**Proposed generatio n (MTPA)**	**Total**	**Utilizatio n (MTP A)**	**% of ut ilization**	**Balanc e quant ity (M TPA)**	**No of storage silos with cap acity**

Ash (Fly & Botto m)	22,95,675. 29	28,86,59 2	51,82,26 7	51,82,267	100	0	11 storage sil os with capaci ty 22 hours m inimum.

Ash pond details:

S.No.	Details of Ash pond	Ash pond
1.	Area (Ha)	7.692
2.	Dyke height (m)	17
3.	Volume (m^3)	199721
4.	Quantity of ash to be disposed (Metric Tons)	159776 (80%)
5.	Expected life of ash pond (number of years and months)	30
6.	Type lining carried in ash pond: HDPE lining of LDPE lining o r clay lining or No lining	HDPE lining will be provided in ash pond
7.	Mode of disposal: Dry disposal or wet slurry (in case of wet sl urry please specify whether HCSD or MCSD or LCSD)	MCSD / LCSD
8.	Ratio of ash: water in slurry mix (1:_):	30:70
9.	Ash water recycling system (AWRS): Yes or No	Yes
10.	Quantity of wastewater from ash pond to be discharged into la nd or water body (m^3)	N/A
11.	Details regarding dyke stability study and name of the organiz ation who conducted the study:	IIT Delhi

28.10.18: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration: Four court cases are pending, however, there is no Environment related court case registered.

A. Summary of court cases

S. No	Case No/ Title	Name of the Cou rt	Brief summary ofthe case	Next date of hearing	Direction/ Act ion taken by t hePP
1	CS (Comm) 2 82 of 2022	High Co urt, Delh i	Suit filed by MBPMPL against S BI for unlawfully withholding Bank Gurantee subm itted by MBPMPL.	28.07.2025	NIL relevance with the proposed expa nsion project
3	W.P. (C) No. 9187 of2023	High Co urt Delhi	Petition filed challenging Ministr y of Finance notification dated 10.03.2023 ext ending the timeline for granting exemption benefits o n custom duty and not on excise by 156 months.	28.07.2025	NIL relevance with the proposed expa nsion project
2	WP(C) No. 17 29	High Co urt, Bilas	Writ Petition against levy of Engi ne Haulage charges	--	NIL relevance with the

S. No	Case No/ Title	Name of the Court	Brief summary ofthe case	Next date of hearing	Direction/ Action taken by thePP
	of 2023	pur	by SECR pursuant to orders issued by Railway Board vide clarification dated 15.03.2021		proposed expansion project
3	WPC 13575 of 2023	High Court, Allahabad	Writ Petition against illicit seizure & auction of 13,022 MT coal by District magistrate Sonebhadra vide order dated 07-04-2023	--	NIL relevance with the proposed expansion project
4	WP (C) No. 7088 of 2022	High Court, Delhi	Writ Petition filed by MBPMPL seeking a refund of benefits (central excise/customs) under Mega Power Policy, which were paid by way of direct payments.	15.07.2025	NIL relevance with the proposed expansion project

B. Summary of Show Cause Notices: There are no Show Cause Notices pertaining to Environment & Forest.

C. Summary of violation: There is no violation case pertaining to the project under the Environment Protection Act, 1986; Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980; the Wildlife (Protection) Act, 1972.

Written submissions

28.10.19: The proponent has submitted the following written submission as suggested by the EAC during the meeting.

1. Revised Emission Modeling considering design condition for SO_2: The revised Air Dispersion Ground Level Concentration (GLCs) for SO_2 with Design coal quantity of 479.52 TPH (3400 kcal/kg) is 37.0 µg/m^3 (maximum GLC @ 1.9km in SE).

Ground level Concentration at AAQ receptors is given below:

Receptors	Baseline Concentration (µg/m^3)			Incremental GLCs (µg/m^3)			Resultant GLCs (µg/m^3)		
	PM	SO_2	NO_2	PM	SO_2	NO_2	PM	SO_2	NO_2
AAQ1	69.77	16.66	19.86	0.48	0.77	0.69	70.25	17.43	20.55
AAQ2	59.51	10.68	15.4	0.91	32.25	3.21	60.42	42.93	18.61
AAQ3	57.61	10.34	14.91	1.12	32.73	3.25	58.73	43.07	18.16
AAQ4	54.16	9.72	14.02	0.74	18.94	1.94	54.9	28.66	15.96
AAQ5	52.44	9.43	3.53	0.26	15.44	1.11	52.7	24.87	4.64
AAQ6	61.79	11.09	15.94	0.93	31.98	3.36	62.72	43.07	19.3
AAQ7	76.23	11.6	16.67	0.43	19.54	1.39	76.66	31.14	18.06
AAQ8	65.75	11.82	16.97	0.19	11.98	0.97	65.94	23.8	17.94
AAQ9	63.28	11.33	16.67	0.63	28.02	2.76	63.91	39.35	19.43
NAAQ Standard							**100**	**80**	**80**

Revised Ground level Concentration at AAQ receptors is given below:

Receptors	Baseline Concentration (µg/m^3)			Incremental GLCs (µg/m^3)			Resultant GLCs (µg/m^3)		
	PM	**SO_2**	**NO_2**	**PM**	**SO_2**	**NO_2**	**PM**	**SO_2**	**NO_2**
AAQ1	69.77	16.66	19.86	0.48	18.51	0.69	70.25	35.17	20.55
AAQ2	59.51	10.68	15.4	0.91	22.19	3.21	60.42	32.87	18.61
AAQ3	57.61	10.34	14.91	1.12	26.43	3.25	58.73	36.77	18.16
AAQ4	54.16	9.72	14.02	0.74	12.34	1.94	54.9	22.06	15.96
AAQ5	52.44	9.43	3.53	0.26	10.83	1.11	52.7	20.26	4.64
AAQ6	61.79	11.09	15.94	0.93	26.83	3.36	62.72	37.92	19.3
AAQ7	76.23	11.6	16.67	0.43	14.32	1.39	76.66	25.92	18.06
AAQ8	65.75	11.82	16.97	0.19	12.86	0.97	65.94	24.68	17.94
AAQ9	63.28	11.33	16.67	0.63	23.59	2.76	63.91	34.92	19.43
NAAQ Standard							**100**	**80**	**80**

2. Land break-up: The land break-up for the 2x800 MW Expansion project is given below:

- Area available within the plant boundary - 417.996 Ha
- Area outside the plant boundary - 33.206 Ha
- Total area for Phase-I & Phase-II - 451.202 Ha

Facilities	**Area for 2x630 MW - PH-1 (In Hectares)**	**Area for 2x800 MW - PH-2 (In Hectares)**	**Total Area for - PH-1 & PH-2 (In Hectares)**
I. Land available within existing plant boundary			
Plant Area	109.717	69.506	179.223
Reservoir	44.534	8.98	53.514
Ash Pond	6.68	7.692	14.372
Green belt (main plant)*	102.637	41.529	144.166
Misc infrastructure	8.097	2.024	10.121
Colony	16.599	0	16.599
Sub Total area within plant boundary - A	*288.264*	*129.731*	***417.996***
II. Additional Area			

Land for future use		11.579	11.579
Area for Railway line		14.462	14.462
Green belt along railway line*		7.166	7.166
Sub Total area outside plant boundary - B		*33.207*	***33.207***
Total area for Phase-I & Phase-II - (A+B)			**451.202**

*Greenbelt area

- The existing Greenbelt area is 102.637 Ha. Additional Greenbelt area development will be 48.695 Ha (41.529 Ha within plant boundary + 7.166 Ha along railway line).
- The total green belt for the project will be 151.332 Ha (102.637 Ha + 48.695 Ha), which is 33.54% of the total project area of 451.202 Ha.

The total area of the project (Existing + Proposed) is 451.202 Ha (417.996 Ha within plant boundary + 33.207 Ha outside).

3. Solar power: A detailed study has already conducted on the feasibility of installing solar panels on the existing buildings and raw water reservoir for solar power generation. The study suggested / recommended installation of 701.8 kWp in the available areas. However, proponent shall revisit the same and increase this to 1000 kWp.

3.4.3. Deliberations by the committee in previous meetings

N/A

3.4.4. Deliberations by the EAC in current meetings

Observations and deliberation of the EAC

28.10.19: The Committee observed and noted the following:

i. Instant proposal is for seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the expansion by addition of 2x800 MW (1600 MW) Coal Based Ultra Super Critical Thermal Power Plant to existing 2x630 MW (1260 MW) by M/s. MB power (Madhya Pradesh) Limited located at village Laharpur, Murra, Guwari, Belia & Jethari, in Jaithari Tehsil, Anuppur District, Madhya Pradesh.

ii. The existing project was accorded environmental clearance vide lr.no. J-13012/99/2008-IA. II(T) dated 28/05/2010 and 07.05.2024 from MoEF&CC. Consent to Operate for the existing unit was accorded by Madhya Pradesh State Pollution Control Board vide lr. No. AW-61310 dated 05.11.2024. The validity of CTO is up to 31.03.2026.

iii. ToR was accorded in 16th EAC meeting held on 28.12.24 with a validity upto 28.12.2028.

iv. Total land required for the existing and proposed project is 451.202 Ha (417.996 within plant +33.207 outside) that has been acquired and is under possession of M/s MB Power (Madhya Pradesh) Ltd. Out of total project area of 451.202 Ha, an area of 37.875 Ha is Forest Land for which Stage I & Stage II Forest clearance was granted vide letter no.- 6-MPCO51/2009- BHO/1032 & 6-MPC051/2009- BHO/3598, Dated 17.08.2011.

v. As per the revised categorization given in the Wildlife (Protection) Amendment Act, 2022, total 33 Schedule I Species found in the buffer zone during field survey and secondary sources. The List of Flora & Fauna is duly authenticated by DFO, Anuppur vide letter dated 16.05.2025. A Wildlife Conservation & Management Plan (WLCP) has been prepared and submitted to Principal Chief Conservator of Forest (Wildlife), Govt. of Madhya Pradesh on dated 12.06.2025 for approval and the same is under process.

vi. Tipan River is located at 1.6 km from the project boundary. Water Resource Department vide letter dated 19.11.2024 has given certificate regarding HFL level of Tipan River. Highest HFL of Tipan River recorded is 499 m while the plant is at an elevation of approx. 502 m than the HFL of Tipan River. The project site is located at substantial higher elevation compared to the HFL of the river.

vii. The EAC also took into consideration the drone survey of the project site and KML file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH portal.

viii. There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site as ascertained from DSS.

ix. The project site is not located within the Critically Polluted Area (CPA) / Severally Polluted Area (SPA) as per CEPI

assessment 2018 of CPCB.
x. The Status of compliance of EC (for unit 2x630 MW) was obtained from Regional Office, Bhopal, MoEF&CC on 10.05.2025. The Action taken report regarding the partially/non-complied conditions has been submitted to RO, MoEF&CC, Bhopal vide letter dated 25.06.2025. The report has been deliberated by the committee and found it satisfactory.
xi. Existing Water requirement is 68,400 m3/day and it is obtained from Son River and permission for the same has been obtained from WRD, Govt. of Madhya Pradesh dated- 16.05.2018. The water requirement for the proposed project is estimated as 1,08,000 m3 /day, out of which 95,808 m3/day of freshwater requirement will be obtained from the Son river and the remaining requirement of 12,192 m3 /day will be met from the treated water from the plant. The permission for drawl of groundwater / surface water is obtained from WRD, Govt of Madhya Pradesh Dated 25-102024. The water will be transported to the plant site through Pipeline.
xii. Coal requirement of 7.36 MMTPA for proposed Stage II (2x800 MW) project will be sourced from CIL mines. The entire coal requirement for for both phase I and phase II shall be transported by rail network only and no road transportation is permitted.
xiii. Existing power requirement of 75.6 MW (Aux. power approx. 6%) is obtained from Phase I (2×600MW) The power requirement for the proposed project is estimated as 96 MW, which will be obtained from the Phase II(2×630MW).
xiv. The Committee deliberated on the baseline data and incremental GLC due to the proposed project and observed that AAQ levels are within NAAQS.
xv. The Stage-II units (2x800 MW) will incorporate high-efficiency (with 99.99%) Electrostatic Precipitators (ESP) to control ash particle emissions. These ESPs will design to limit particulate emissions < 30 mg/Nm3. Low NOx Burner, SOFA, SCR and combustion staging techniques to minimize NOx emissions from the steam generator. Chimney of 275 m height will be constructed for minimizing SOx emission. Dust Extraction and Dust Suppression system shall be implemented to minimize the pollution.
xvi. Committee deliberated on the action plan of Hydrogeology study and found it satisfactory.
xvii. The committee noted that with respect to water pollution control, proponent shall use Sewage treatment plant and treated sewage water shall be utilized for horticulture purpose. Effluent will be treated in ETP. There will be no effluent discharge from the premises, hence the ZLD will be maintained. Along with this, the water from the cooling towers will be recirculated. A state-of-the-art roof top rain water harvesting system will be provided to collect the run -off for ground water recharging.
xviii. The Fly Ash will be collected in dry form in silos for further utilization/transportation through rail wagons / closed trucks to adjacent Cement Plants. 100% Ash will be utilised in Cement Industries, reclamation of abandoned mines, manufacturing of bricks, road construction, and aggregate replacement in concrete, etc. as per Fly Ash Notification, 31st December'2021. Provision will be made for disposal of un-utilized ash in high concentration slurry form to ash dyke.
xix. Existing capital cost of project was Rs 9000 Cr. The capital cost of the proposed project is Rs.19,200 Crores and the capital cost for environmental protection measures is proposed as Rs 2109.5 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 46.22 Crores.
xx. Existing green belt has been developed in 102.637 ha area which is about 22.75 % of the total project area of 451.202 ha with total sapling of 2,87,350. Additional Greenbelt will be developed in 48.695 ha. Thus, total of 151.332 ha area (33.54 % of total project area) will be developed as greenbelt. A 5-50 m (25 meter minimum) wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 1,19,000 saplings will be planted and nurtured in 48.695 hectares in 3 years.
xxi. Public Hearing was conducted on 07.05.2025. The Committee looked in to the videography of the public hearing proceedings, deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory. The committee advised the PP to implement the PH action plan in a time bound manner. Total 19.906 crore budget has been allocated to address the public needs highlighted during public hearing.
xxii. The Committee noted that the EIA report is in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components.
xxiii. Nickel concentrations in coal was observed higher. EAC suggested to revisit the data.
xxiv. EAC suggested for installation of 2 MW solar PV for energy conservation measures.
xxv. No court cases and show cause notices related to Environment are pending against the proposed project.
xxvi. The EAC also deliberated on the written submission of the project proponent and found it satisfactory.
xxvii. The committee is also of the view that a sub-committee of EAC shall visit the site after grant of EC (preferably after 4 months) for a review.
xxviii. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

Recommendations of the Committee:

28.10.20: In view of the foregoing and after detailed deliberations, the committee **recommended** the instant proposal

for grant of Environment Clearance under the provisions of EIA Notification, 2006 **subject to uploading of written submission on PARIVESH Portal** and stipulation of the following specific conditions and general conditions based on project specific requirements:

3.4.5. Recommendation of EAC

Recommended (Subject to submission of requisite information/ documents)

3.4.6. Details of Environment Conditions

3.4.6.1. Specific

[A] Environmental Management	
1.	Project proponent shall adopt 100% utilization of ash generated as a result of the expansion project in accordance with the ash utilization notification dated 31/12/2021 and its subsequent amendment. Area for the additional ash pond proposed under the expansion project of 2x800MW shall not exceed 7.692 Ha as committed.
2.	In addition to the existing 04 Continuous Ambient Air Quality Monitoring Stations (CAAQMS), project proponent shall install additional one continuous ambient air quality monitoring at suitable locations in and around project site in consultation with MPPCB within six months from the date of grant of EC as committed.
3.	The water requirement for the proposed project is estimated as 1,08,000 KLD and out of which 95,808 m3/day of fresh water requirement will be obtained from the Son River and the remaining requirement of 12,192 m3 /day will be met from the treated water from the plant.
4.	Project proponent shall comply with the recommendations made in the biodiversity assessment report and Hydrogeology report in a time bound manner. Compliance status in this regard shall be submitted to the Regional Office of MoEF&CC along with the six monthly compliance report.
5.	Project proponent shall store harvested rainwater in the project boundary and utilize the same for plantation, recharging water in the pond and domestic utilization in colonies. A record shall be maintained of water collected through rainwater and its supply system. PP shall get the water audit done every year to optimize the water requirement.
6.	Project proponent shall implement the protective measure proposed in EMP in a time-bound manner. The budget earmarked for the same is Rs.2109.5 Crores (Capital) and Rs. 46.22 crores (recurring) and should be kept in separate accounts and audited annually. The implementation status along with the amount spent with documentary proof shall be submitted to the concerned Regional Office for the activities carried out during the previous year.
7.	Project proponent shall assess the carbon footprint of the project and develop carbon sink/carbon sequestration resources using modern technologies. The implementation report shall be submitted to the concerned Regional Office of the MoEF&CC.
8.	Project proponent shall ensure that diesel operated vehicles will be switched over to E-Vehicles/ CNG vehicles in a time bound manner, replace the passenger vehicles to E-vehicle in phased manner. Further, for local movement of officials, Contract of Vehicles deployment shall be awarded to Project affected people and all efforts for adopting heavy E-vehicles/CNG Vehicles like Bulkers for ash transportation for short distance subject to availability of such E-vehicle and adequate charging infrastructure in the surrounding area shall be provided. PP shall submit the action taken report to concerned RO with amount spent, photographs (before & after), number of such non diesel vehicles deployed etc. in six monthly compliance report.
9.	The Project Proponent shall provide stack of 275 meters height and shall abide by the provisions of the notification number G.S.R 465 (E) dated 11/07/2025 related to FGD.
1	Ash pond area and fly ash utilization shall be as per Fly Ash Notification issued by Ministry/ CPCB from time to

0.	time.
11.	Project proponent shall ensure that pipelines carrying the fly ash and effluent shall be inspected regularly for any leakages.
12.	Effluent of 12,192 KLD will be treated through Effluent Treatment Plant. As committed by the Project proponent, Zero liquid discharge shall be adopted for the existing and the proposed plant. No wastewater will be discharged outside the project site.
13.	PP shall install 2 MW solar PV for conservation measures. Action plan in this regard shall be submitted to the Regional Office of the MoEF&CC and SPCB within 6 months from the date of grant of EC.PP should explore more opportunities to put solar PV in near by School and other Government buildings also.
14.	PP shall implement the concurrent plantation plan in a time bound manner. Total of 151.332 ha area (of total plant area of 451.202 ha) will be developed as greenbelt. A 5 m - 50 m (Minimum 25 meter) wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. PP shall also adopt Miyawaki plantation technique and plantation with minimum 2 meter height of the saplings in upcoming monsoon season. The budget earmarked for the green belt, plantation inside and outside the plant area, along the transportation route and Miyawaki Plantation area shall be kept in a separate account and audited annually. PP should annually submit the audited statement of expenditure along with proof of activities viz. photographs (before & after with geolocation date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC and on PARIVESH Por
15.	Project proponent shall carry out community plantation with incentive scheme by distributing 50,000 saplings per year for a period of five years. Further, PP shall provide basic facilities to the nearby schools such as drinking water, sanitation facilities and shall also develop green belt around the nearby schools. Regular watering of saplings planted in the nearby schools will be carried out by Project Proponent to mitigate the air and noise pollution. Further, PP shall organize quarterly awareness programs for school students to educate them on the significance and preservation of trees.
16.	Wildlife conservation plan as approved by the competent authority shall be implemented. Additional, budget shall be added in the plan, in case additional measures suggested by state wildlife department. The final Wildlife conservation plan duly approved by the CWLW shall be submitted to RO, MoEF&CC within a time frame of three months from the date of grant of EC and the budget approved by the concerned authority shall be deposited in a government account.
17.	Project proponent shall install LED display of air quality (Continuous AAQ monitoring) and stack emission (Continuous emission monitoring) at prominent locations preferably outside the plant's main entrance for public viewing and in administrative complex and maintenance of devices shall be done regularly.
18.	Project proponent shall carry out Water Sprinkling on roads inside the plant area/ administrative/ residential areas and outside the plant area at least for 2 KM on a regular basis to control the air pollution. A logbook shall be maintained for the activity and be in six-monthly compliance report.
19.	PP shall deploy vacuum based vehicle for everyday cleaning of the road in and around plant site at least for 5 KM.
20.	Environment Audit of plant shall be done annually and report shall be submitted to Regional office of the Ministry.
21.	A detailed action plan regarding leachate handling shall be prepared and implemented in consultation with SPCB and the same shall be submitted to the Regional Office of the Ministry. Leachate shall be treated and reused. No treated leachate shall be discharged in any circumstances. Characteristics of Leachate and the treated leachate shall be monitored once in quarter and records shall be maintained.
22.	Oil and grease recovered from the treatment plant should be disposed only through authorized recyclers.

23.	Monitoring of surface water quality and Ground Water quality shall also be regularly conducted in and around the project site and records to be maintained. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall also be undertaken and results/findings submitted along with half yearly monitoring report. The monitored data shall be submitted regularly on PARIVESH portal as part of Half Yearly compliance report.
24.	For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
25.	PP shall ensure that all types of plastic waste generated from the plant shall be stored separately in isolated area and disposed of strictly adhering to the Plastic Waste Management Rules 2016 (as amended). In pursuant to the Ministry's OM dated 18/07/2022. PP shall also create awareness among the people working in the project area as well as in its surrounding area on the ban on Single Use Plastic (SUP) in order to ensure compliance of Ministry's Notification published by the Ministry on 12/08/2021. A report along with photograph on the measures taken shall also be included in the six monthly compliance report submitted by PP.
26.	PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than Green belt development. The action in this regard shall be submitted concerned RO in six monthly report.
[B] Socio-economic	
1.	A vision document comprising prospective plan for implementation of various CER activities, plantation programme outside the project cover area, rejuvenation and conservation of water bodies within 5 km radius of the project cover area shall be prepared and submitted to the Regional Office of the Ministry within 6 months. Implementation status of the same shall be reported to the Regional office in 6 monthly compliance report.
2.	Epidemiological Study among population within 5 km radius of project cover area shall be carried out on regular interval (Once in two year) through independent agency. Necessary measures shall be taken as per findings of study in consultation with district administration. Action taken report shall be submitted to the Regional Office of the Ministry.
3.	The budget proposed for PH is Rs19.906 Crores. The budget proposed shall be kept in a separate account and audited annually. Project proponent shall implement the action plan to address the issues raised during public hearing within a time frame of 5 years from the date of grant of EC. In addition to this, PP shall strengthen the existing Primary Health Center (PHC) & Community Health Center (CHC) in the study area for better public health as committed. Compliance status in this regard shall be submitted along with the six monthly compliance to the concerned Regional Office of MoEF&CC.
4.	The establishment of a robust public grievance redressal mechanism to address concerns and complaints from local communities regarding the power plant's operations, environmental impacts, or social issues shall be developed. A Senior Officer shall review the functioning of the mechanism twice in a month.
[C] Miscellaneous	
1.	An Environmental Cell headed by the Environment Manger with postgraduate qualification in environmental science/environmental engineering, shall be created. It shall be ensured that the Head of the Cell shall directly report to the Head of the Plant who would be accountable for implementation of environmental regulations and social impact improvement/mitigation measures.
2.	Consent for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
3.	All necessary clearance from the concerned Authority, as may be applicable should be obtained prior to commencement of project or activity.
4.	A sub Committee of the EAC shall visit the site post EC to recommend any further mitigation measures.

3.4.6.2. Standard

1(d)	**Thermal Power Plants**
Statutory compliance	
1.	Emission Standards for Thermal Power Plants as per Ministry's Notification S.O. 3305(E) dated 7.12.2015, G.S.R.593(E) dated 28.6.2018 and as amended from time to time shall be complied.
2.	Part C of Schedule II of Municipal Solid Wastes Rules, 2016 dated 08.04.2016 as amended from time to time shall be complied for power plants based on Municipal Solid Waste.
3.	MoEF&CC Notifications on Water Consumption vide Notification No. S.O. 3305 (E) dated 07.12.2015 read with G.S.R 593 (E) dated 28.6.2018 as amended from time to time shall be complied.
4.	The recommendation from Standing Committee of NBWL under the Wildlife (Protection) Act, 1972 should be obtained, if applicable.
5.	No Objection Certificate from Ministry of Civil Aviation be obtained for installation of requisite chimney height and its siting criteria for height clearance.
Ash content/mode of transporatation of coal	
1.	MoEF&CC Notification issued vide S.O. 1561 (E) dated 21.05.2020 and as amended from time to time shall be complied which inter-alia include use of coal by Thermal Power Plants, without stipulations as regards ash content or distance, shall be permitted subject to compliance of conditions prescribed under (1) Setting Up Technology Solution for emission norms, (2) Management of Ash Ponds and (3) Transportation.
Air quality monitoring and Management	
1.	Project proponent shall abide by the provisions of the notification number G.S.R 465(E) dated 11/07/2025 related to FGD.
2.	Low NOX Burners with Over Fire Air (OFA) system shall be installed to achieve NOX emission standard of 100 mg/Nm3.
3.	High efficiency Electrostatic Precipitators (ESPs) shall be installed in each unit to ensure that particulate matter (PM) emission to meet the stipulated standards of 30 mg/Nm3.
4.	Stack with a height of 275 meters shall be provided with continuous online monitoring instruments for SO2, Nox and Particulate Matter as per extant rules.
5.	Exit velocity of flue gases shall not be less than 20-25 m/s. Mercury emissions from stack shall also be monitored periodically.
6.	Continuous Ambient Air Quality monitoring system shall be set up to monitor common/criteria pollutants from the flue gases such as PM10, PM2.5, SO2, NOX within the plant area at five locations. The monitoring of other locations (at least three locations outside the plant area covering upwind and downwind directions at an angle of 120° each) shall be carried out manually.
7.	Adequate dust extraction/suppression system shall be installed in coal handling, ash handling areas and material transfer points to control fugitive emissions.
8.	Appropriate Air Pollution Control measures (Des/DSs) be provided at all the dust generating sources including sufficient water sprinkling arrangements at various locations viz., roads, excavation sites, crusher plants, transfer

	points, loading and unloading areas, etc.
Noise pollution and its control measures	
1.	The Ambient Noise levels shall meet the standards prescribed as per the Noise Pollution (Regulation and Control) Rules, 2000.
2.	Persons exposed to high noise generating equipment shall use Personal Protective Equipment (PPE) like earplugs/ear muffs, etc.
3.	Periodical medical examination on hearing loss shall be carried out for all the workers and maintain audiometric record and for treatment of any hearing loss including rotating to non-noisy/less noisy areas.
Human Health Environment	
1.	Bi-annual Health check-up of all the workers is to be conducted. The study shall take into account of chronic exposure to noise which may lead to adverse effects like increase in heart rate and blood pressure, hypertension and peripheral vasoconstriction and thus increased peripheral vascular resistance. Similarly, the study shall also assess the health impacts due to air polluting agents.
2.	Impact of operation of power plant on agricultural crops, large water bodies (as applicable) once in two years by engaging an institute of repute. The study shall also include impact due to heavy metals associated with emission from power plant.
Water quality monitoring and Management	
1.	Induced/Natural draft closed cycle wet cooling system including cooling towers shall be set up with minimum Cycles of Concentration (COC) of 5.0 or above for power plants using fresh water to achieve specific water consumption of 3.0 m3/MWhr.
2.	In case of the water withdrawal from river, a minimum flow 15% of the average flow of 120 consecutive leanest days should be maintained for environmental flow whichever is higher, to be released during the lean season after water withdrawal for proposed power plant.
3.	Records pertaining to measurements of daily water withdrawal and river flows (obtained from Irrigation Department/Water Resources Department) immediately upstream and downstream of withdrawal site shall be maintained.
4.	Regular (at least once in six months) monitoring of groundwater quality in and around the ash pond area including presence of heavy metals (Hg, Cr, As, Pb, etc.) shall be carried out as per CPCB guidelines. Surface water quality monitoring shall be undertaken for major surface water bodies as per the EMP. The data so obtained should be compared with the baseline data so as to ensure that the groundwater and surface water quality is not adversely impacted due to the project & its activities.
5.	The treated effluents emanating from the different processes such as DM plant, boiler blow down, ash pond/dyke, sewage, etc. conforming to the prescribed standards shall be re-circulated and reused. Sludge/ rejects will be disposed in accordance with the Hazardous Waste Management Rules.
6.	Hot water dispensed from the condenser should be adequately cooled to ensure the temperature of the released surface water is not more than 5 degrees Celsius above the temperature of the intake water.
7.	Wastewater generation of 12,192 KLD from various sources (viz. cooling tower blowdown, boiler blow down, wastewater from ash handling, etc) shall be treated to meet the standards of pH: 6.5-8.5; Total Suspended Solids: 100 mg/l; Oil & Grease: 20 mg/l; Copper: 1 mg/l; Iron:1 mg/l; Free Chlorine: 0.5; Zinc: 1.0 mg/l; Total Chromium: 0.2 mg/l; Phosphate: 5.0 mg/l.
8.	Sewage generation of 72 KLD will be treated by setting up Sewage Treatment plant to maintain the treated

	sewage characteristics of pH: 6.5-9.0; Bio-Chemical Oxygen Demand (BOD): 30 mg/l; Total Suspended Solids: 100 mg/l; Faecal Coliforms (Most Probable Number): <1000 per 100 ml.
9.	Action plan by the TPPs located within 50 km of a municipality or any Urban Local Body (ULB) to use the treated sewage water produced by the municipality/Urban Local Body (ULB) to reduce fresh water consumption shall be submitted.
Risk Mitigation and Disaster Management	
1.	Adequate safety measures and environmental safeguards shall be provided in the plant area to control spontaneous fires in coal yard, especially during dry and humid season.
2.	Storage facilities for auxiliary liquid fuel such as LDO and HFO/LSHS shall be made as per the extant rules in the plant area in accordance with the directives of Petroleum & Explosives Safety Organisation (PESO). Sulphur Content in the liquid fuel should not exceed 0.5%.
3.	Ergonomic working conditions with First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
4.	Safety management plan based on Risk Assessment shall be prepared to limit the risk exposure to the workers within the plant boundary.
5.	Regular mock drills for on-site emergency management plan and Integrated Emergency Response System shall be developed for all kind of possible disaster situations.
Green belt and Biodiversity conservation	
1.	Green belt shall be developed in an area of 33% of the total project with indigenous native tree species in accordance with CPCB guidelines. The green belt shall inter-alia cover an entire periphery of the plant.
2.	In-situ/ex-situ Conservation Plan for the conservation of flora and fauna should be prepared and implemented.
Waste management	
1.	Solid waste management should be planned in accordance with extant Solid Waste Management Rules, 2016.
2.	Toxicity Characteristic Leachate Procedure (TCLP) test shall be conducted for any substance, potential of leaching heavy metals into the surrounding areas as well as into the groundwater.
3.	Ash pond shall be lined with impervious liner as per the soil conditions. Adequate dam/dyke safety measures shall also be implemented to protect the ash dyke from getting breached.
4.	Fly ash shall be collected in dry form and ash generated shall be used in phased manner as per provisions of the Notification on Fly Ash Utilization issued by the Ministry S.O. 5481 dated 31.12.2021, S.O.6169 (E) dated 30.12.2021, S.O.05 (E) dated 01.01.2024 and amendment thereto.
5.	Unutilized ash shall be disposed off in the ash pond in the form of High Concentration Slurry/Medium Concentration Slurry/Lean Concentration Slurry method. Ash water recycling system shall be set up to recover supernatant water.
Monitoring of compliance	
1.	Environmental Audit of the project be taken up by the third party for preparation of Environmental Statement as per Form-V & Conditions stipulated in the EC and report be submitted to the Ministry.
2.	Resettlement & Rehabilitation Plan as per the extant rules of Govt. of India and respective State Govt. shall be

	followed, if applicable.
3.	Energy Conservation Plan to be implemented as envisaged in the EIA / EMP report. Renewable Energy Purchase Obligation as set by MoP/State Government shall be met either by establishing renewable energy power plant (such as solar, wind, etc.) or by purchasing Renewable Energy Certificates.
4.	Energy and Water Audit shall be conducted at least once in two years and recommendations arising out of the Report should be followed. A report in this regard shall be submitted to Ministry's Regional Office.
5.	The project proponent shall (Post-EC Monitoring): a. send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government; b. upload the clearance letter on the web site of the company as a part of information to the general public. c. inform the public through advertisement within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forest and Climate Change (MoEF&CC) at http://parviesh.nic.in. d. upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same periodically; e. monitor the criteria pollutants level namely; PM (PM10& PM2.5incase of ambient AAQ), SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company; f. submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB; g. submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company; h. inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project and the date of commencement of the land development work.
Corporate Environmental Responsibility (CER) activities	
1.	CER activities will be carried out as per Ministry's OM F.No.22- 65/2017- IA.III dated 30th September, 2020 and 22-65/2017- IA.III dated 25.02.2021 or as proposed by the PP in reference to Public Hearing or as earmarked in the EIA/EMP report along with the detailed scheduled of implementation with appropriate budgeting. Statement on the commitments (activity-wise) made during public hearing to facilitate the discussion on the CER in compliance of the shall be submitted.

4. Any Other Item(s)

N/A

5. List of Attendees

Sr. No.	Name	Designation	Email ID	Remarks
1	Dr Santoshkumar Hampannavar	Member (EAC)	san**********@yahoo.com	Present
2	Dr Umesh Jagannathrao Kahalekar	Member (EAC)	uka*******@rediffmail.com	Present
3	Shri K B Biswas	Member (EAC)	bis*********@gmail.com	Present
4	Shri Mahi Pal Singh	Member (EAC)	mps********@nic.in	Present
5	Sundar Ramanathan	Scientist - F	r.s*****@nic.in	Present
6	Sh Inder Pal Singh Matharu IFS	Chairman, EAC	mat********@gmail.com	Present
7	Sh Lalit Kapur	Member (EAC)	lka********@yahoo.com	Present

8	Sh Savalge Chandrasekhar	Member (EAC)	sav*****@gmail.com	Present
9	Prof Shyam Shanker Singh	Member (EAC)	sin********@gmail.com	Present
10	Dr Vinod Agrawal	Member (EAC)	vin*****@yahoo.com	Present
11	Prof R M Bhattacharjee	Member (EAC)	rmb**********@iitism.ac.in	Present
12	Shri Prasoon Gargava	Scientist F	pra*********@nic.in	Present
13	Shri Harmeet Sahaney	Scientist E	har**********@gmail.com	Present

Ministry of Environment, Forest and Climate Change
Impact Assessment Division
(Thermal sector)

Date of zero draft MoM sent to Chairman: 22/08/2025
Approval by Chairman: 25/08/2025
Uploading on PARIVESH: 26/08/2025

SUMMARY RECORD OF THE TWENTY EIGHTH (28TH) MEETING OF EXPERT APPRAISAL COMMITTEE (EAC) HELD ON 12-13TH AUGUST, 2025 FOR ENVIRONMENT APPRAISAL OF THERMAL SECTOR PROJECTS THROUGH PHYSICAL MODE.

12th August, 2025 [TUESDAY]

At the outset, Shri. Inder Pal Singh Matharu (I.F.S Retd.), Chairman, Expert Appraisal Committee (Thermal Power & Coal Mining) welcomed the Expert members & other participants and requested to start the proceeding as per the agenda listed for this meeting. The list of members who participated in the meeting is at **Annexure – I**. The Standard/Generic ToR conditions shall be system generated through the PARIVESH Portal.

Confirmation of the Minutes of the 27th Meeting of the EAC (Thermal): The minutes of the 27th meeting of the EAC (Thermal) held on 08/07/2025 has been confirmed by the EAC as uploaded on Parivesh.

Agenda No 28.1

28.1 Expansion of Coal Based Thermal Power Plant (Phase-II) from 3x600 MW to 6x600 MW by **M/s KSK Mahanadi Power Company Limited** located at Village Nariyara, Tehsil Akaltara, **Dist. Janjgir-Champa, Chhattisgarh - Environmental Clearance under S.O. 1247(E) dated 18.03.3021 – regarding.**

[Proposal no. IA/CG/THE/544973/2025, F.No. J-13012/44/08-IA.II(T)]

28.1.1: M/s. KSK Mahanadi Power Company Limited (KMPCL) has made an online application vide proposal no. IA/CG/THE/544973/2025 dated 18/07/2025 along with copy of EIA/EMP report, Form and Certified compliance report, seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at item no. 1(d) Under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level. The project do not attract the provisions of general condition of the EIA Notification, 2006.

Name of the EIA consultant: M/s Greencindia Consulting (P) Ltd, Ghaziabad. [S. No. 114. List of ACOs with their Certificate No.: NABET/EIA/2326/RA 0297 (Valid up to Feb 22, 2026).

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

28.1.2: The project site mentioned above have obtained following Environmental Clearance from MoEF&CC:

i. The existing project was accorded environmental clearance vide letter no. J - 13012/44/08– IA.II (T) dated 19/10/2009 from MoEF&CC for setting up of 6x 600 MW TPP.

ii. Out of 6x600MW, 3x600 MW (Unit-2, Unit-3 and Unit-4) coal based sub-critical thermal power plant has already been commissioned during 2013 and 2018 and units are fully operational at present. Consent to Operate for 3 x 600 MW (Unit 2,3 & 4) was accorded by Chhattisgarh Environment Conservation Board, Raipur vide letter no 903/TS/CECB/2024 dated 29/04/2024 with validity up to 17/05/2026. The balance 3x600 MW (Unit-1, Unit-5, and Unit-6) coal based sub-critical thermal power plant was under construction and the construction activities were suspended (before October 2019) due to financial constraints. The construction activities related to Unit No. 1, 5 & 6 was completed to the extent of 67.14%. Further, KMPCL has obtained Structural Stability Certificate from the Expert approved by Chief Inspector of factories, Govt. of Chhattisgarh. It is certified that the present existing structures of Unit1, 5 & 6 are structurally stable and suitable for continuation of work towards completion.

28.1.3: Implementation status of the existing EC

S. No.	Configuration	Capacity (MW)	Date of EC	Implementation Status	Production as per CTO
1	6x600	1800	19/10/2009	**3x600 MW (Unit-2, Unit-3 and Unit-4** coal based sub-critical thermal power plant was commissioned during 2013 and 2018 and are fully operational Construction activities related to Unit No. 1, 5 & 6 was completed to the extent of 67.14% and same suspended before October 2019 due to financial constraints	1800 MW

28.1.4: The instant proposal of M/s KMPCL is for seeking fresh Environmental clearance for unit no. 1, 5 & 6 (3 x 600 MW) to complete the commissioning of the constructed facilities (as 67.14% of TPP construction activities have been completed) as per MoEF&CC notification S.O. 1247 (E) dated 18/03/2021 under EIA, 2006.

28.1.5: Status of present level of construction of 3x600 MW (Unit 1, 5 & 6)

Name of the facility	Status of construction work	Percentage of construction works
Unit 1 (600 MW)	➢ Majority of Boiler Structure erection complete ➢ All foundations of BTG complete, TG foundation partially complete ➢ Air-Preheater and Bunker partially erected. ➢ Majority of Power House Building Erection complete ➢ Cooling Towers civil works mostly complete	65.1
Unit 5 (600 MW)	➢ Boiler structure erection complete ➢ All foundations of BTG Equipment complete including TG Deck ➢ Majority of ESP Erection complete. ➢ Boiler Drum, Pendant Superheater and Reheater, Air-Preheater, Bunker Erection complete. ➢ Majority of Condenser Erection complete ➢ Cooling Towers civil works mostly complete	82.4
Unit 6 (600 MW)	➢ All foundations of BTG Equipment complete, TG foundation partially complete ➢ Majority of Power House Building Erection complete . ➢ Cooling Towers civil works mostly complete	53.7
Common facilities	➢ 275 M tall stacks (2 Nos, tri flue) complete. ➢ Water Treatment Plant Complete ➢ Raw Water Reservoir and Ash Dykes complete ➢ Ash Slurry Disposal system, Silos complete ➢ Coal Handling Plant complete, ➢ 400-KV Switch-yard complete	100%

28.1.6: Certified compliance report from Regional Office:

The request letter for latest & updated 'Certified Compliance Report' (CCR) has been submitted to RO, Raipur vide letter dated 27.01.2025 and the site visit was completed on 26. 03.2025. CCR with observations received on 05.06.2025. Action taken report on observations submitted to Regional Office on 09.06.2025 and the same is summarized as below:

S. No.	Non compliances details	Observation of RO (abridged)	Condition no.			Re-assessment by RO / Response by PP
			EC date	Specific	General	
1	-	The stipulated condition No.(xl) of EC letter No.J-13012/44/2008-IA.II(T) dated 23/9/2015 is repugnant with the additional condition stipulated in the Ministry's O.M. dated 28/8/2019 regarding use of Fly ash as soil conditioner in agriculture needs. Ministry may examine the same and the EC conditions, which are repugnant with each other may be amended appropriately. Ministry may consider issuance of EC, superseding the existing ECs and amendments already accorded to avoid multiple statutory documents for the same project.	23/9/2015	xi	-	KMPCL will request for amendment in the existing EC for suitable directions in this regard**.**
2	-	From the Undertaking submitted by the Project Authority, it has been observed that project authority has spent only part of the amount earmarked in the stipulated EC condition. However, part of the facilities (three Units) still has not been implemented and thus Ministry may take appropriate view in this regard –– condition No.3(ii), (xliv) and condition No.(iv) of the EC letter dated 19/10/2009.	19/10/2009	3 (vii)	-	• KMPCL has been directed by MoEF&CC vide letter dated 19.10.2009 to spend Rs.64 crores on CSR in the span of 5 years, during construction of the project for 6 units (6x600 MW). In compliance to this direction, CSR activities were started from 2009 and Rs. 59.45 crores have been spent till date, even though KMPCL was admitted into NCLT and declared as Non performing Asset (NPA). • Now, KMPCL is

S. No.	Non compliances details	Observation of RO (abridged)	Condition no.			Re-assessment by RO / Response by PP
			EC date	Specific	General	
						committed to continue the promised CSR activities with the left over funds of Rs. 4.55 crores in addition to the CER fund as part of expansion proposal • KMPCL has earmarked a budget of Rs.23 Crores towards CER activities for three years, FY-2025-26 to FY-2027-28 in compliance to TOR conditions and to meet the requirements raised during recent public consultation held in April 2025.
3	-	Harnessing solar power within the premises of the plant have not been implemented as stipulated in the condition No. 3(xxxv).	19.10.2009, 24.01.20122 3.09.2015	xxxv		Feasibility study has been completed for roof top solar installation. Estimated capex for 4 MW roof top solar installation is INR 18 Cr, which will be implemented progressively in three years.
4	-	The condition No. 3(xxxvi) regarding long term study of radio activity / an in-built continuous monitoring for radio activity and heavy metals in coal and fly ash have not been complied with. If there is any practical difficulty in the implementation of the condition, project authority ought to have amended the condition from the MoEF& CC. The feasibility and availability of technology in India for in-built continuous monitoring of radio activity and heavy metals in coal and fly ash needs to be examined and Ministry may take appropriate view in this regard.	19.10.2009, 24.01.20122 3.09.2015	xxxvi		• The Radio-active element was tested for Fly ash and Bottom Ash by Modern Test Centre Berhampur Odisha in 2021. Report submitted. • Radio activity analysis for Coal & Ash samples were analysed in April 2025 by Govt. of India Dept. of Atomic Energy Board of Radiation and Isotope Technology, Mumbai. Report submitted. • The same Tests shall be carried out on yearly basis and reports shall be submitted to MoEF & CC as part of compliance report.

S. No.	Non compliances details	Observation of RO (abridged)	Condition no.			Re-assessment by RO / Response by PP
			EC date	Specific	General	
5	-	Details are not made available regarding CSR Committee or a social audit committee or suitable credible external agency appointed for proper and periodic monitoring of CSR activities undertaken – condition No.3 (xlv).	19.10.2009, 24.01.20122 3.09.2015	xxxxv		After take over of KMPCL by JSW Energy, a CSR committee has been constituted and relevant resolution of the board in this regard is available. A reputed independent external agency will be engaged for evaluation of CSR activities and the report will be made available by March 2026.
6	-	Details are not made available regarding additional 50 Ha of afforestation – Additional condition No.6(ii)in	12.08.2021	6(ii)	-	The Amendment of EC with above condition was issued vide letter no. J-13012/44/2008-IA.I(T)dated 13.08.2021 for retrofitting APC equipment to meet the revised emission norms dated 07.12.2025. Accordingly, additional plantation in 50 Ha will be developed in next 5 years @ 2500 saplings/Ha. **Plantation Action Plan** Year wise plantation plan is as under: FY 25-26: 5 Ha FY 26-27: 10 Ha FY 27-28: 15 Ha FY 28-29: 10 Ha FY 29-30: 10 Ha

28.1.7: Status of FGD installation

i. Status of FGD categorization as per CPCB criteria

- There are no Critically Polluted Areas (CPAs) and non-attainment cities within the 10-km radius of the KMPCL plant area.
- As per the categorization list of CPCB dated 23/06/2022, the existing units (No. 2, 3 & 4) falls under Category C.
- The balance under construction Units -1,5 & 6 of KMPCL are located within the same premises and do not fall within any CPA nor in any non-attainment cities as per MoEF &CC notification G.S.R. 465(E) dated 11/07/2025. **Hence, it is also classified as C-Category project.**

As per the MoEF&CC notification dated 07.12.2015 and its subsequent amendment notification G.S.R. 465(E) dated 11/07/2025, KMPCL thermal power plant falls under Category C, compliance is required only with stack height norms under GSR 742(E) dated

30.08.1990 guidelines. In this regard, 2 stacks of 275-m each with tri flue are already existing. Boilers of Unit 1,2 & 3 are connected to one stack and boilers of Unit-4,5 & 6 are connected to another stack.

Utilisation of existing stacks without FGD (as per notification dated 11.07.2025) with Hybrid ESP & with NOx control (Low NOx burners and SOFA) is proposed to meet the permissible emission norms as per the notification dated 07.12.2015.

- Categorization details of TPP: The proposed project falls under Category C (Other than those included in Category A and B) in terms of the provisions under notification dated 11/07/2025.
- Sulphur content of the coal to be fired in the boiler: 0.4% – 0.5%

ii. Status of FGD installation for existing unit: Not installed. However guidelines/ directions as per GSR 787 (E) dated 30.12.2024 & MoEF&CC notification dated 11.07.2025 will be adhered to.

iii. Action plan for installation of new stack in compliance to the notification number GSR 742 (E) dated the 30/08/1990 for the proposed expansion: Complied. Two stacks of 275-m height were already existing and the proposed units will be attached to the existing stacks; no new stack is envisaged.

28.1.8: The detail of the ToR is furnished as below:

Proposal No with date	Consideration	Details	Date of accord	ToR Validity	Remarks
IA/CG/THE/209699 /2021 dated 20/05/2021	12th, 17th and 24th EAC meetings held on 14th June, 2021, 30th November, 2021 and 9th May, 2022 respectively	Terms of Reference	27/06/2022	26/06/2026	Public Hearing was exempted by the EAC as per S.O. 1247(E) dated 18.03.3021. However, public consultation through written responses has been prescribed.

28.1.9: Environmental site settings

S. No.	Particulars	Details	Remarks
1	Total land	828.46 ha Entire land has been sourced during 2007-2009 for 6x600 MW plant and is under possession of KMPCL. No additional land proposed to be acquired.	Land use: Industrial
2	Land use	**Sr.** | **Facilities** | **Existing Area in**	

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td>break up</td><td>
<table>
<tr><th>No.</th><th></th><th>Ha</th></tr>
<tr><td>1</td><td>Main Plant</td><td>35.96</td></tr>
<tr><td>2</td><td>Coal Handling System</td><td>71.19</td></tr>
<tr><td>3</td><td>Railway facilities</td><td>47</td></tr>
<tr><td>4</td><td>Water System</td><td>77</td></tr>
<tr><td>5</td><td>Switch Yard</td><td>41</td></tr>
<tr><td>6</td><td>Green belt</td><td>277</td></tr>
<tr><td>7</td><td>Additional Green belt including Miyawaki</td><td>52</td></tr>
<tr><td>8</td><td>Ash Pond</td><td>66</td></tr>
<tr><td>9</td><td>Workshop, Store, Project yard, Hydrogen Plant</td><td>85.21</td></tr>
<tr><td>10</td><td>Parking, Road</td><td>39.8</td></tr>
<tr><td>11</td><td>Labor Colony</td><td>36.3</td></tr>
<tr><td></td><td>Total</td><td>828.46</td></tr>
</table>
</td><td></td></tr>
<tr><td>3</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014 & 20/02/2025</td><td>The proposed expansion is within the plant premises area. The land is already under the possession with KSK Mahanadi Power Company Limited.

No additional land acquisition is envisaged for the Units 1, 5 & 6.</td><td></td></tr>
<tr><td>4</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Project site: No land acquisition required for the Units 1, 5 & 6.
Study Area:
<table>
<tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Tarod</td><td>0.5 km</td><td>NE</td></tr>
<tr><td>Rogda</td><td>0.5 km</td><td>NW</td></tr>
<tr><td>Banahil</td><td>0.46 km</td><td>E</td></tr>
<tr><td>Nariyara</td><td>0.70 km</td><td>S</td></tr>
</table>
</td><td>R&R is not required as land is already under possession of the proponent</td></tr>
<tr><td>5</td><td>Existence of school and hospitals if any.</td><td>
<table>
<tr><th colspan="3">School</th></tr>
<tr><td>Govt. Naveen Primary School, Patel paraa</td><td>0.6 km</td><td>NE</td></tr>
<tr><td>Govt. High school, Kirari</td><td>2.39 km</td><td>E</td></tr>
<tr><td>Govt. Middle school, Dev Kirari</td><td>3.15 km</td><td>E</td></tr>
<tr><td>Govt. Boys Middle school, Nariyara</td><td>1.87 km</td><td>SW</td></tr>
<tr><td>Swarsati sisu mandir, Nariyara</td><td>1.89 km</td><td>SW</td></tr>
<tr><th colspan="3">Hospitals</th></tr>
</table>
</td><td></td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>Sub health centre, Tarod</td><td>0.73 km</td><td>NE</td></tr>
<tr><td>Health centre, Nariyara</td><td>0.3 km</td><td>S</td></tr>
<tr><td>Health care sub centre, Akaltara</td><td>2.5 km</td><td>E</td></tr>
<tr><td>Public health centre, Nariyara</td><td>2.5 km</td><td>SW</td></tr>
<tr><td>Public health centre, Gondadih</td><td>2.10 km</td><td>W</td></tr>
</table>
</td><td></td></tr>
<tr><td>6</td><td>Latitude and Longitude of all corners of the project site.</td><td>
A. Plant site
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>21˚58’51” N</td><td>82˚24’42” E</td></tr>
<tr><td>B</td><td>21˚58’ 28” N</td><td>82˚25’ 46” E</td></tr>
<tr><td>C</td><td>21˚58’ 02” N</td><td>82˚25’ 39” E</td></tr>
<tr><td>D</td><td>21˚57’ 12” N</td><td>82˚25’ 05” E</td></tr>
<tr><td>E</td><td>21˚57’ 16” N</td><td>82˚24’ 42” E</td></tr>
<tr><td>F</td><td>21˚57’ 07” N</td><td>82˚24’ 10” E</td></tr>
<tr><td>G</td><td>21˚57’ 38” N</td><td>82˚23’ 49” E</td></tr>
<tr><td>H</td><td>21˚58’ 02” N</td><td>82˚22’ 55” E</td></tr>
<tr><td>I</td><td>21˚58’ 25” N</td><td>82˚22’ 56” E</td></tr>
<tr><td>J</td><td>21˚58’ 36” N</td><td>82˚23’ 47” E</td></tr>
</table>
B. Ash pond
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>I</td><td>21°57'50.41"N</td><td>82°23'59.83"E</td></tr>
<tr><td>II</td><td>21°57'41.75"N</td><td>82°24'22.30"E</td></tr>
<tr><td>III</td><td>21°57'24.89"N</td><td>82°24'15.81"E</td></tr>
<tr><td>IV</td><td>21°57'18.48"N</td><td>82°24'32.60"E</td></tr>
<tr><td>V</td><td>21°57'11.49"N</td><td>82°24'14.06"E</td></tr>
<tr><td>VI</td><td>21°57'33.95"N</td><td>82°23'52.47"N</td></tr>
</table>
</td><td></td></tr>
<tr><td>7</td><td>Elevation of the project site</td><td>▪ Plant site elevation is 277 – 291m amsl
▪ Finished Floor Level of plant area is 273.5 m amsl</td><td></td></tr>
<tr><td>8</td><td>Involvement of Forest land if any.</td><td>Status of stage I Forest Clearance: Not Applicable
Area of the forest land involved: Nil</td><td></td></tr>
<tr><td>9</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td>
Project site: Nil within the project site

Study area
<table>
<tr><th>Water Body</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Upka Nala</td><td>0.6 km</td><td>WNW</td></tr>
<tr><td>Lilagarh River</td><td>5.1 km</td><td>W</td></tr>
<tr><td>Arasmeta lake</td><td>6.5 km</td><td>W</td></tr>
</table>
HFL Elevation of Lilagarh River HFL is 243.7 m above MSL as per the letter from Irrigation Dept dt. 06.06.2025
</td><td>The distance between River HFL and nearest plant boundary is 5.1-km.</td></tr>
</table>

S. No.	Particulars	Details	Remarks
		Plant elevation is 271-292 m above MSL	
10	Existence of ESZ/ ESA/national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area	No Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. within the study area of 10 km. Reserved and protected forests: There is no RF/PF within the study area and the same has been certified by DFO, Janjgir, Champa vide letter dated 10/04/2008.	
11	Archaeological sites monuments/ historical temples etc.	None within 7-km radius & none within impact zone of project • Mud Fort Kotagarh at 9.55km in the NNE; • Mud Fort at Kotmi, 8.11 km- NNW	
12	Facility envisaged in CRZ area (Only for coastal power plant)	Not Applicable	-
13	Involvement of Critically Polluted Area/Severely Polluted area as per 2018 CEPI score	No Involvement of Critically Polluted Area/ Severely Polluted area.	-

28.1.10: The unit configuration and capacity of existing and proposed project is given as below:

S. No.	Existing power plant configuration and capacity	Proposed power Plant configuration and capacity	Total	Technology adopted*
1	Phase I 3x600 MW (1800 MW)	Phase II 3x600 MW (1800 MW)	3600 MW	**Stage-I:** sub-critical with pulverized Coal firing **Stage-II:** sub-critical with pulverized Coal firing

*Note: * - As per the Ministry of Power O.M. dated 08/02/2018, thermal power projects based on sub-critical Technology, which have either been granted "Environmental Clearances" or been issued 'Terms of Reference (ToR)' by the Central/State Govts. and achieved "zero date/Start date" as defined in CERC Regulations, may be allowed to be commissioned even after the expiry of the 12th plan. In view of this, proposal was considered for grant of fresh EC.*

28.1.11: The details of the fuel (coal/LDO) requirement for the proposed project/ expansion cum proposed project along with its source and mode of transportation is given as below:

Details	Fuel requirement	Source	Distance from site (Kms)	Mode of Transportation	Coal characteristics (Worst case scenario)	Linkage document
Coal						
Existing TPP (3x600 MW)	7.07 million TPA	SECL	65-70	Rail	Ash - (36%) Sulphur - (0.42%) Moisture (11.65%) GCV -3169 Kcal/Kg	SECL and MCL under SHAKTI auction scheme.
		MCL	100-150	Rail		
Proposed TPP (3x600 MW)	7.07 million TPA	CIL	65-150	Rail	Ash - (36%) Sulphur - (0.42%) Moisture (11.65%) GCV -3169 Kcal/Kg	Coal India Limited under SHAKTI Scheme.
LDO						
Existing TPP (3x600 MW)	2000 KLPA	IOC	200	Road	Flash Point – 60 ^{0}C Density – 953 kg/m3 Sulphur – 0.46% Ash – 0.1% Calorific Value – 10350 gross cal/g	NA
Proposed TPP (3x600 MW)	2000 KLPA	IOC	200	Road		

28.1.12: Existing Water requirement for 3 existing operating units is about 4333 m^3/hr (40 MCM). Similarly, for the balance under construction 3 units, the water requirement will be about 4333 m^3/hr (40 MCM). Total fresh water requirement is 8666 m^3/hr.

Approval for drawing 100 MCM of water for all 6 units from River Mahanadi has been obtained from Irrigation department, Chhattisgarh state vide letter no 3313/AF4-82/AS-2/31/ ओजप्र/8, Raipur dated 23.06.2008 and 5958/AF4-82/31/AS-2/ ओजप्र/8, Raipur dated 15.10.2009. The water will be transported to the plant site through pipeline.

The specific water consumption of existing operating three units is less than 3.0 cum/MWh and specific water consumption will be maintained at or below 3.0 cum/MWh for all the 6 units.

28.1.13: Baseline Environmental Studies

Period	March – May, 2024	Additional study (if any)
AAQ parameters at 9 Locations (min and max)	$PM_{2.5}$ = 33.2 To 36.29 µg/m^3 PM_{10} = 57.96 to 64.52 µg/m^3 SO_2 = 12.25 to 13.6 µg/m^3 NOx = 14.35 To 15.78 µg/m^3 CO = 0.18 To 0.22 mg/m^3	
Incremental GLC level	**275-m stack height with NOx Control** PM = 2.003 µg/m^3 (at 1.9 km in SSW Direction) SO_2 = 33.3 µg/m^3 (at 1.9 km in SSW Direction) NOx =6.68 µg/m^3 (at 1.9 km in SSW Direction) 2 stacks of 275-m each with tri flue are existing. Boilers of Unit 1,2 & 3 are connected to one stack and boilers of Unit-4,5 & 6 are connected to another stack. Utilisation of existing stacks without FGD (as per notification dated 11.07.2025) with Hybrid ESP & with NOx control through Low NOx burners and SOFA is proposed.	
Ground water quality at 8 locations	pH: 7.03 to 7.82, Total Hardness: 144 to 426 mg/l, Chlorides: 70.5 to 277 mg/l, Fluoride: 0.4 to 1.1 mg/l, Heavy metals: Fe: 0.03 to 0.15 mg/l, Zn: 0.18 to 0.38 mg/l As: <0.01 mg/l	
Surface water quality at 5 locations	pH: 7.24 to 8.21; DO: 5.2 to 5.6 mg/l; BOD: 7.5 to 8.6 mg/l COD 30 to 40 mg/l; Heavy metals: (Fe): 0.05 to 0.13 mg/l Zn: BDL As: BDL	
Effluent generation details and its treatment	**Industrial Wastewater** • The ZLD system is implemented for treating industrial wastes for all the 6 units. Wastewater Treatment system is in place and is sufficient to treat wastewater generated (2086 m^3/h) from all Units (6x600 MW) • Waste water handling system consists of RO plant & UF and common effluent monitoring basin. Out of the total (2086 m^3/h) effluent generated, 922 m^3/h goes to RO & UF whereas the balance 1164 m^3/h goes to common effluent monitoring basin.	

<table>
<tr><th>Period</th><th>March – May, 2024</th><th>Additional study (if any)</th></tr>
<tr><td></td><td>

RO generates a permeate of 744 m^3/h which will be reused in Cooling Tower makeup. Whereas RO reject of 263 m^3/h will be sent to common monitoring basin and then is (263+1164=1400m^3/h) used for dust suppression, ash handling and miscellaneous uses

<u>Domestic Wastewater</u>

450 KLD of domestic effluent generating from operating units and it is envisaged that about additional 400 KLD of domestic effluent will be generated from balance units. The STP of 2x600 KLD is already installed
Entire treated domestic sewage is being used for Greenbelt / plantation. The treated sewage water quality is monitored and the quality meets the CTO conditions.

</td><td></td></tr>
<tr><td>Noise levels Leq (Day and Night)</td><td>48.7 to 53.2 dB(A) for the day time and 40.9 to 43.9 dB(A) for the Night time.</td><td></td></tr>
<tr><td>Traffic assessment study findings</td><td>

Traffic study has been conducted at NH 49 which is approximately 2.0 km from the plant site.
Transportation of coal will be done 100% by rail. In case of exigency on account of limitations of rake/ Coal India issues, up to 10% of the coal will be transported via Road.
Existing PCU is 288-1302 PCU/hr on Banahil Jn, Akaltara, Tarod, and Matusri, and existing level of service (LOS) is:

<table>
<tr><th>Road</th><th>V (Volume in PCU/hr.)</th><th>C (Capacity in PCU/hr.)</th><th>Existing V/C Ratio</th><th>LOS</th></tr>
<tr><td>Banahil Jn</td><td>288</td><td>1500</td><td>0.19</td><td>A</td></tr>
<tr><td>Akaltara</td><td>730</td><td>1500</td><td>0.48</td><td>C</td></tr>
<tr><td>Tarod, NH 200</td><td>2292</td><td>5400</td><td>0.42</td><td>C</td></tr>
<tr><td>Matusri, NH 200</td><td>1302</td><td>5400</td><td>0.24</td><td>B</td></tr>
</table>

PCU load after proposed project will be 288 (Existing) + 160 (Additional) PCU/hr, 730 (Existing) +160 (Additional) PCU/hr, 2292 (Existing) +160 (Additional) PCU/hr and 1302 (Existing) +160 (Additional) PCU/hr and level of service (LOS) will be:

<table>
<tr><th>Road</th><th>V (Volume in</th><th>C (Capacity in</th><th>Existing V/C Ratio</th><th>LOS</th></tr>
</table>
</td><td></td></tr>
</table>

<table>
<tr><th>Period</th><th>March – May, 2024</th><th>Additional study (if any)</th></tr>
<tr><td></td><td>
<table>
<tr><th></th><th>PCU/hr.)</th><th>PCU/hr.)</th><th></th><th></th></tr>
<tr><td>Banahil Jn</td><td>448</td><td>1500</td><td>0.29</td><td>B</td></tr>
<tr><td>Akaltara</td><td>890</td><td>1500</td><td>0.59</td><td>C</td></tr>
<tr><td>Tarod, NH 200</td><td>2452</td><td>5400</td><td>0.46</td><td>C</td></tr>
<tr><td>Matusri, NH 200</td><td>1462</td><td>5400</td><td>0.27</td><td>B</td></tr>
</table>
**Note: Capacity as per IRC-64-1990 Guide line for capacity for roads.*
Conclusion: The level of service will be B, C, C and B respectively after including additional traffic due to proposed project.
</td><td></td></tr>
<tr><td>Soil Quality at 08 Locations</td><td>Bulk density: 1.1 to 1.4 gm/cc;
pH range 7.45 to 7.82;
Electrical conductivity (EC) 287 to 443 µS/cm;
calcium content: 16.3 to 27.6 meq/100;
exchangeable sodium: 0.46 to 0.72 meq/100g;
exchangeable potassium: 0.38 to 0.56 meq/100g;
Nitrogen: 67.3 to 84.2 kg/ha;
Phosphorous: 84.5 to 126.3 kg/ha;
Cation Exchange Capacity (CEC): 34.14 to 47.12 meq/100g;
Magnesium: 15.7 to 25.3 meq/100g;
Sulphur: 78.4 to 120.8 mg/kg;
Organic Matter: 0.55 to 0.83%</td><td></td></tr>
<tr><td>Flora and fauna</td><td>List of Schedule-I flora and endangered Fauna if any: Yes
If yes status of site-specific wildlife conservation plan.

The following Schedule-I faunal Sps were found in the study area:
Herpestes edwardsii
Vulpes bengalensi
Chamaeleo zeylanicus
Ptyas mucosa
Naja naja
Crocodylus palustris
Elanus caeruleus</td><td>Wildlife and conservation plan for schedule I species prepared by Southern Enviro Engineers Private Limited, Hyderabad submitted for approval to PCCF, Raipur (Wild Life) on 08.04.2025</td></tr>
<tr><td>Hydrogeology study</td><td>The power plant and the buffer zone fall in the Mahanadi River basin and is drained by tributaries of Sheonath River especially by Lilagar river in the west of project area and Uttyal, Pawai & Kanji rivers in the east of the project area.
The drainage density porous & permeable in nature and are having medium surface run-off.
The depth to water in buffer zone ranges from 1.00 to 2.80 m bgl. during post-monsoon period while it is deeper ranging from 2.40 to 5.50 m bgl during pre-monsoon.
Hydraulic conductivity is found in the range of 1</td><td>National Institute of Technology Warangal</td></tr>
</table>

Period	March – May, 2024	Additional study (if any)
	X 10^{-7} to 1 X 10^{-9} cm/sec and ash ponds are provided with HDPE liner (2-mm) to control seepage and hence leaching of heavy metals into groundwater. • Action taken: KMPCL has been monitoring the ground water quality around the Ash Dyke area monthly basis • To maintain safety of the bund from slope failures, settlement and breaching bunds are regularly monitored and maintained. Settlement gauges are installed to find any safety concerns due to settlement.	
Impact study on bio-diversity and aquatic ecology	<u>Terrestrial Ecology</u> 38 tree species, 19 shrub species, 15 herbs species, 7 grasses and 9 aquatic plant species were found in the study area As per the primary ecological survey in the study area, the trees & shrubs are medium diverse. Theherbs and grass are highly diverse. No endangered floral sps observed. 7 mammals, 17 Avi fauna, 5 reptiles, 4 amphibians and 5 fish sps were found in the study area. 7 Schedul-1 fauna found in the area <u>Aquatic Ecology</u> Diversity of phytoplankton and zooplankton varies between 2.78-3.12 and 2.42-2.64 respectively. Based on the diversity index, this water can be classified as Mesotrophic in nature and slightly enriched with nutrients.	
Risk assessment Study	Recommendations of Risk assessment report with mitigation measures The preliminary risk assessment has been completed for the proposed power plant and associated facilities and the broad conclusions are as follows: • There will be no significant community impacts or environmental damage consequences; and • The hazardous event scenarios and risks in general at proposed plant can be adequately managed to acceptable levels by performing the recommended safety studies as part of detailed design, applying recommended control strategies and implementing a Safety Management System as practiced in the existing plant	

Period	March – May, 2024	Additional study (if any)
	Risk Reduction Opportunities • Buildings and plant structures designed for cyclone and seismic events (where appropriate), • Provision for adequate water capacity to supply fire protection systems and critical process water; • Isolate people from load carrying/mechanical handling systems, vehicle traffic and storage and stacking locations; • Installation of fit-for-purpose access ways and fall protection systems to facilitate safe access to fixed and mobile plant; • Provision and integrity of process tanks, waste holding tanks and bunded areas as per relevant standards; • Containment of hazardous materials; • Security of facility to prevent unauthorized access to plant, introduction of prohibited items, and control of onsite traffic; and • Development of emergency response management systems commensurate with site specific hazards and risks (fire, explosion, rescue and first aid).	
Marine impact assessment study (Only for coastal based TPPs)	Not Applicable	-

28.1.14: The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal	Remarks
	Hazardous Waste					
i.	Waste Oil	Plant	15		Disposal through authorised Recycler	
ii.	Waste /residue containing oil	Plant	3.5		Disposal through authorised Recycler	
	Non hazardous					
iii.	Municipal Solid Waste	Plant	350		Decomposable waste will be vermicomposted. Non-biodegradable waste will be disposed	

					Authorized dealer	

28.1.15: Public Consultation: The proposed project is exemption from public hearing as per provisions of the MoEF&CC Notification S. O. 1247(E) dated 18 March 2021. However, public consultation through written responses have been prescribed.

Details of advertisement given	28/03/2025
Date of public consultation	28/03- 29/04/2025
Venue	Not applicable
Presiding Officer	Not applicable
Major issues raised	Employment, Hospital & School, College for Girls, Road Traffic and Coal & Ash Transportation, Clarification on EIA report, and Fulfilling last Public Hearing promises
No. of people attended	26 written representations have been received by Regional Officer, CECB, Bilaspur

Action plan as per MoEF&CC O.M. dated 30/09/2020

Sr. No	Key Area Identification for Activities Based on Public Needs Highlighted During Public Consultation	Proposed Expenditures year wise (Rs. In Lakhs)					Total Proposed Expenditure (Rs. In Lakhs)	Physical Targets
		1st Year	2nd Year	3rd Year	4th Year	5th Year		
A	**Educational Initiatives**							
	College for Girls which boost girl education, Nariyara	100	50	50	50	0	250	1 college building with 10 classrooms, 5 staff rooms, 1 library, 1 computer lab; total ~1500 sqm Target completion by July 2028.
	English Medium High School, Village-Rogda, Village: Taraud	100	50	50	50	0	250	1 school building with 8 classrooms, 4 admin rooms, playground; total ~1200 sqm Target completion by July 2028.
	Vocational training centres	50	35	35	0	0	250	1 training center with 5 labs, 3 classrooms, 2 admin rooms; ~1000 sqm Target completion by July 2028.
	ITI/Public school	50	40	40	0	0		1 ITI/school with 6 classrooms, 4 workshops/labs, 1 office; ~1300 sqm Target completion by July 2028.
	Sub Total	**300**	**175**	**175**	**100**	**0**	**750**	-

Sr. No	Key Area Identification for Activities Based on Public Needs Highlighted During Public Consultation	Proposed Expenditures year wise (Rs. In Lakhs)					Total Proposed Expenditure (Rs. In Lakhs)	Physical Targets
		1st Year	2nd Year	3rd Year	4th Year	5th Year		
B	**Community Health Initiatives**							
	Health centre at Village: Taraud	50	50	50	0	0	150	1 PHC with 5 rooms (OPD, pharmacy, wards, doctor room, waiting); ~500 sqm Target completion by July 2028.
	Veterinary hospital at Village-Rogda	25	25	0	0	0	50	1 veterinary hospital with 5 rooms (OPD, treatment, medicine store, staff); ~300 sqm Target completion by July 2027
	Full-fledged hospital, Village-Rogda, Village: Taraud	100	100	100	100	100	500	1 full-fledged hospital (20 beds), 15+ rooms (OPD, emergency, maternity, wards, labs, admin); ~2000 sqm. Target completion by July 2029.
	Sub Total	**175**	**175**	**150**	**100**	**100**	**700**	
C	**Community Rural Infrastructure Development**							
	Infrastructural facilities	100	200	150	0	0	450	10 Solar streets lights in nearby villages (Nariyara, Banahil, Tarod, Rogda, Amora, Murlidih, Pakariya and Latiya) consultation with Gram Panchayat Rural infra: 3 internal roads (1.5 km), 3 water tanks, 4 drainage lines Target completion by July 2028
	Cow Sheds (03) at Nariyara) District -Janjgir-Champa	10	10	0	0	0	20	3 cow sheds (each ~100 sqm), cattle capacity ~50 each Target completion by July 2028.
	Sub Total	**110**	**210**	**150**	**0**	**0**	**470**	
D	**Support for Nature Conservation**							
	Pond Construction, Deeping of pond	60	40	50	50	50	250	the construction of a 3 pond at Rogda Village Deeping and renovation of pond boundary
	Deeping and renovation of pond boundary	50	40	40	0	0	130	
	Sub Total	**110**	**80**	**90**	**50**	**50**	**380**	

Sr. No	Key Area Identification for Activities Based on Public Needs Highlighted During Public Consultation	Proposed Expenditures year wise (Rs. In Lakhs)					Total Proposed Expenditure (Rs. In Lakhs)	Physical Targets
		1st Year	2nd Year	3rd Year	4th Year	5th Year		
	TOTAL						**2300**	

28.1.16: The capital cost of the proposed project is Rs 8,100 Crores and the capital cost for environmental protection measures is proposed as Rs 851.6 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 39.4 Crores. The employment generation from the proposed project / expansion is approx. 400 during operation and 2000 during construction. The details of cost for environmental protection measures is as follows:

Sl. No.	Description of Item	Existing (Rs. In Crores/lakhs)		Proposed (Rs. In Crores/lakhs)	
		Capital Cost	Recurring Cost	Capital Cost	Recurring Cost
1	**Air Quality Management**				
A	Upgradation of ESP, installation of Dust suppression system in Limestone and Gypsum storage and handling areas	-	-	370	36
B	Low NOx burners, SOFA, other technology to meet NOx emission norms	-	-	400	0.2
C	Noise enclosures	-	-	10	0.2
2	**Water and Waste water management system**				
A	ETP upgradation	-	-	45	1.0
3	**Hazardous waste management**				
A	Upgradation of Hazardous shed and other facilities	-	-	2.0	-
4	**Green Belt Development**	-	-	6.2	1.5
5	**Wild Life Conservation Plan**			0.4	-
6	**Solar Power**			18	0.55
TOTAL				**851.6**	**39.45**

28.1.17: Existing green belt has been developed in 277 ha area which is about 33.4 % of the total project area of 828.46 ha .7,20,000 plants were planted and 6,47,250 plants have survived (90%) as verified by " Society For Environment & Integrated Development", Raipur (CECB Approved). It is further proposed to plant some more saplings under gap plantation so as to reach 100% survival rate in next 2 years.

In addition, as per the approved ToR, KMPCL has identified 2 Ha of land within the plant premises for raising additional plantation through Miyawaki plantation technique during 2025-26 and 2026-27.

As per the EC condition of EC dated 13.08.2021, addition area of 50-Ha has been identified and green belt will be developed in next 5 years period @ 2500 saplings/Ha.

Year wise plantation plan is as under:

FY 25-26: 5 Ha
FY 26-27: 10 Ha
FY 27-28: 15 Ha
FY 28-29: 10 Ha
FY 29-30: 10 Ha

28.1.18: Ash management for last three years (Only for expansion cases)

Year	Quantity generated (MT)	Quantity utilized (MT)	% of Utilization	Balance quantity (MTP)	No of storage silos with capacity
2022-23	24,05,591	24,05,591	100%	0	2x3800 m^3
2023-24	24,55,284	24,55,284	100%	0	
2024-25	24,40,339	20,87,409	86%	3,52,929	

A. Fly ash Details for last three years

S. No.	Activity (as applicable)	Quantity Utilized, MT	Percentage of Fly Ash utilised w.r.t total fly ash generation	Remarks (Prior approval of SPCB details to be mentioned)
1.	Fly ash-based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	20,188	1%	Prior approval of SPCB in place
		50,235	2%	
		69,814	3 %	
2.	Cement manufacturing	13,61,096	63%	
		14,95,343	68%	
		12,94,261	59 %	
3.	Ready mix concrete	2,993	0%	
4.	Construction of roads, road and fly over embankment	11,275	1%	
		2,70,536	12%	
		1,07,687	5 %	
5.	Construction of dams	0	0%	
6.	Filling up of low-lying area	5,84,406	27%	Prior approval of SPCB in place
		3,34,646	15%	
		1,27,224	6 %	
7.	Filling of mine voids/stone quarry:	1,88,067	9%	Prior approval of SPCB in place
		58,996	3%	
		3,22,167	15 %	
	Total	**62,98,934 MT**		

B. **Bottom ash details for last three years**

S. No.	Activity (as applicable)	Quantity utilised	Percentage of total bottom ash	Remarks (Prior approval of SPCB details to be mentioned)
1.	Construction of roads, road and fly over embankment	9,116	4%	Prior approval of SPCB
		1,20,645	49%	
		63,552	26%	
2.	Filling up of low lying area	1,97,397	82%	Prior approval of SPCB
		1,19,036	48%	
		29,471	12%	
3.	Filling of mine voids	34,046	14%	Prior approval of SPCB
		5,848	2%	
		70,241	29%	
	Total	**6,49,352 MT**		

C. Legacy ash details

Stored ash in the active Ash Pond:

S. No.	Activity (as applicable)	Quantity	Percentage	Remarks (Prior approval of SPCB details to be mentioned)
1.	Construction of roads, road and fly over embankment	14,845	5 %	Prior approval of SPCB
2.	Filling up of low-lying area	1,43,119	47 %	Prior approval of SPCB
3.	Filling of mine voids	1,47,032	48 %	Prior approval of SPCB
	Total	**3,04,996**	**100%**	

D. Ash Pond details - Existing Ash Dyke

S. No	Details of Ash pond	HCSD Lagoon (Fly Ash Dyke)	BA Lagoon 2 (Bottom Ash dyke)	Total
1.	Status of ash pond (Active/Exhausted, yet to be reclaimed/ Reclaimed)	Active	Active	
2.	Area (Ha)	32.5	33.5	66 Ha.
3.	Dyke height (m)	7.9	11.3	

S. No	Details of Ash pond	HCSD Lagoon (Fly Ash Dyke)	BA Lagoon 2 (Bottom Ash dyke)	Total
4.	Volume (m^3)	13,84,000	46,67,000	
5.	Quantity of ash disposed (Metric Tons)	2,72,159	80,770	
6.	Available volume in percentage and quantity of ash can be further disposed (Metric Tons)	22,27841 89%	45,86230 98 %	
7.	Expected life of ash pond (number of years and months)	Not applicable Active dyke designed for temporary storage	Not applicable Active dyke designed for temporary storage	
8.	Type lining carried in ash pond: HDPE lining of LDPE Inning or clay Inning or No lining	HDPE lining	HDPE lining	
9.	Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD)	HCSD	LCSD	
10.	Ratio of ash: water in slurry mix (1:..)	1:0.538	1:2.3	
11.	Ash water recycling system (AWRS) installed and functioning: Yes or No	Not available	Not available	
12.	Quantity of wastewater from ash pond discharged into land or water body (m^3)	Nil	Nil	
13.	Details regarding dyke stability study and name of the organization who conducted the study.	Detailed ash dyke stability study conducted by NIT Warangal in 2025		

E. Proposed ash utilization plan for expansion project

Year	Estimated Quantity GENERATION (MTPA)			Ash Utilization MTPA	Utilization (%)
	Existing TPP (3 x 600MW)	Proposed TPP (3 x 600 MW)	Total Ash Generation, MTPA		
2025-26	2.80	0	2.80	2.91	118.5
2026-27	2.455	0	2.455	2.91	118.5
2027-28	2.455	0.4	2.855	2.958	103
2028-29	2.455	1.0	3.455	3.455	100
2029-30	2.455	2.3	4.755	4.755	100
2030-31	2.455	2.455	4.91	4.91	100
*** (3x600 MW Unit 1,5 & 6) expected to fully operational by June 2029**					

Ash pond details: No new Ash Pond/ dyke proposed. Existing Ash Pond will be used. Details give in D above

28.1.19: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration:

A. Summary of court cases:

- Total 85 cases were filed out of which 28 were disposed.
- Details of the pending 57 cases are as follows:
  Land related cases: 29
  Labour and OHC related :1
  Labour and Minimum wages: 7
  Income tax related: 5
  NGT case on fly ash :1
  Tribunal under coal bearing area:1
  Debt recovery tribunal, Hyderabad and Chennai: 12
  EPF cases-1

Details of the one NGT case is as follows:

Sr. No.	Petition/Case/Appeal No.	Description Ongoing Case	Next Date of Hearing	Current Status
1	OA 152 /2016 National Green Tribunal, Bhopal (Central Zone), Sudiep Shrivastava Vs State of Chattisgarh, NHAI & others (KMPCL R-10 formal party)	One Mr. Sudiep Shrivastava filed application before NGT contending that NHAI is constructing two national highways i.e. NH 130 & NH-43 by filling the top layer with red soil instead using Fly ash and is flouting the	Next Date Awaited	KMPCL made formal party & no relief sought against it. Appearance made on 12.01.2017. The Petitioner filed an application to implead contractors and was allowed on 27.01.2017. NHAI filed compliance report on 27.01.17.

Sr. No.	Petition/Case/Appeal No.	Description Ongoing Case	Next Date of Hearing	Current Status
		MoEF notifications in use of fly ash and also NGT guidelines in that regard & for consequential directions.		For replies of Respondents. The State had filed letter dt 06.04.17 for convening meeting of all stakeholders on 08.06.2017. Matter was posted for report of meeting and directed to produce Minutes of the same was produced by Govt. The last hearing took place on 26/07/17.

B. Summary of Show Cause Notices: Nil

C. Summary of violation: Nil

28.1.20: Compliance to the observations of sub-committee site visit report (Only in case of site visit by the sub-committee) – Nil

28.1.21: Name of the EIA consultant: **M/s Greencindia Consulting(P) Ltd, Ghaziabad**. [S. No. 114. List of ACOs with their **Certificate No.: NABET/EIA/2326/RA 0297 (Valid up to Feb 22, 2026**).

28.1.22: Written submissions

Project proponent submitted the following written submission during the meeting:

S. No.	Queries raised	Reply
1.	Identification of CPA and non-attainment cities on google map with the distances	• There are no Critically Polluted Areas (CPAs) and non-attainment cities within the 10-km radius of the KMPCL plant area. • The distances of CPA and non-attainment cities is marked in the enclosed map • Locations of CPAs and non-attainment cities identified in lined with the CPCB guideline, dated 25.8.2020 & 16.11.2022 • Both of exiting operating Units - 2,3 & 4 of KMPCL (which have valid EC) and proposed balance under construction Units -1,5 & 6 of KMPCL (for which revalidation of EC is sought) are located within the same premises and do not fall within any CPA nor in any non-attainment cities as per MoEF &CC notification G.S.R. 465(E) dated 11/07/2025. **Hence, it is classified as C-Category project.** A google map showing distance of CPA and Non-attainment cities is submitted.

<table>
<tr><th>S. No.</th><th>Queries raised</th><th>Reply</th></tr>
<tr><td></td><td></td><td></td></tr>
<tr><td>2.</td><td>Comparison of AAQ between before 2009 and current</td><td>
<table>
<tr><th>Sl. No.</th><th>Parameters</th><th>Baseline Range in Pre-monsoon - 2008, µg/m³</th><th>Baseline Range in Pre-monsoon 2024, µg/m³</th></tr>
<tr><td>1</td><td>PM_{10}</td><td>20.1 – 67.8</td><td>48.1 – 65.3</td></tr>
<tr><td>2</td><td>SO_2</td><td>4.1 – 11.5</td><td>9.3 – 13.6</td></tr>
<tr><td>3</td><td>NO_X</td><td>4.6 – 14.2</td><td>11.2 – 16.1</td></tr>
</table>
The comparison of the pre-project and post-project AAQ data reveals that PM10 levels show an improvement whereas the SO_2 & NO_X levels show a very negligible increase which can be attributed to various localised activities.
</td></tr>
<tr><td>3.</td><td>Comparison of biodiversity between before 2009 and current</td><td>

On comparing the biodiversity study conducted during pre-project stage in 2008 and present status in 2024 indicate that no decline in the species diversity which indicates the effective dust control measures and stable operation of plant.
The close look into the study reveals that therophytes, hemicryptophytes, Epiphytes have increased the richness from 2008 to 2024.
Further, it can be observed that, the large tree species were planted to the extent of 7,20,000 nos in the plant site that has changed the species richness which leads to enhanced ecosystem functions, increased biomass production, improved nutrient cycling, and greater stability and resilience to environmental changes.

</td></tr>
<tr><td>4.</td><td>List out the mitigation measures for dust control</td><td>
Additional Mitigation Measures to control the Fugitive Dust

Gap filling plantation to meet the 100% plantation.
Installation of sprinklers, wind screens, mobile fogging systems, mist catcher and strengthening the green belt between coal handling & ash handling areas and nearby villages.
Speed limit of the vehicles passing near to the villages is being monitored and maintained at 15 kmph.
Exploring the technology to increase the Hybrid ESP performance to improve the dust levels below the 30 mg/Nm³ (current norm)

</td></tr>
<tr><td>5.</td><td>Sector-wise Fly ash utilization</td><td>
Sector wise fly ash generation for existing/operating units (2,3 & 4) is submitted.
Proposed plan for unit 1,5 & 6 ash generation is to channelize into multiple end-use activities. The major utilization route will be by cement manufacturing, accounting for 59–60% of total fly ash generated. Mine void filling (up to 11%) and other utilization for fly such as road construction (19.0 %) & bricks (10 %) and will account for the balance utilisation.
<table>
<tr><th>Sl. No.</th><th>Description</th><th>Per Year (in MT) for Unit-1,5,6</th><th>% UTILISATION</th></tr>
<tr><td></td><td>Ash generation</td><td>24,55,284</td><td>-</td></tr>
<tr><td>1</td><td>Cement Industry</td><td>14,73,170</td><td>60.0</td></tr>
<tr><td>2</td><td>Brick manufacturing</td><td>2,45,528</td><td>10.0</td></tr>
<tr><td>3</td><td>Road construction</td><td>4,66,504</td><td>19.0</td></tr>
<tr><td>4</td><td>Mines void filling</td><td>2,70,811</td><td>11.0</td></tr>
<tr><td></td><td colspan="2">% Ash Utilization</td><td>100.00</td></tr>
</table>
</td></tr>
<tr><td>6.</td><td>CO and CO_2 measurement</td><td>Source emissions monitoring data for CO & CO_2 is enclosed below. The monitoring is being conducted on regular basis by NAML</td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Queries raised</th><th>Reply</th></tr>
<tr><td></td><td></td><td>accredited third party.
<table>
<tr><th colspan="5">Stack monitoring (Outlet) data for the Month- March 2025</th></tr>
<tr><th>Name of the Stack</th><th>Date</th><th>O2 %</th><th>CO (ppm)</th><th>CO2 %</th></tr>
<tr><td>Unit-02</td><td>25.03.25</td><td>10.14</td><td>0.0</td><td>9.54</td></tr>
<tr><td>Unit-03</td><td>25.03.25</td><td>11.52</td><td>0.0</td><td>8.29</td></tr>
<tr><td>Unit-04</td><td>26.03.25</td><td>9.44</td><td>0.0</td><td>10.02</td></tr>
</table>
<table>
<tr><th colspan="5">Stack monitoring (Outlet) data for the Month- April 2025</th></tr>
<tr><th>Name of the Stack</th><th>Date</th><th>O2 %</th><th>CO (ppm)</th><th>CO2 %</th></tr>
<tr><td>Unit-02</td><td>28.04.2025</td><td>8.96</td><td>0.0</td><td>10.34</td></tr>
<tr><td>Unit-03</td><td>28.04.2025</td><td>7.92</td><td>1.0</td><td>11.18</td></tr>
<tr><td>Unit-04</td><td>28.04.2025</td><td>9.26</td><td>0.0</td><td>10.27</td></tr>
</table>
<table>
<tr><th colspan="5">Stack monitoring (Outlet) data for the Month- May 2025</th></tr>
<tr><th>Name of the Stack</th><th>Date</th><th>O2 %</th><th>CO (ppm)</th><th>CO2 %</th></tr>
<tr><td>Unit-02</td><td>27.05.2025</td><td>8.87</td><td>0.0</td><td>10.44</td></tr>
<tr><td>Unit-03</td><td>28.05.2026</td><td>10.41</td><td>0.0</td><td>9.26</td></tr>
<tr><td>Unit-04</td><td>28.05.2025</td><td>8.43</td><td>0.0</td><td>10.96</td></tr>
</table>
<table>
<tr><th colspan="5">Stack monitoring (Outlet) data for the Month- June 2025</th></tr>
<tr><th>Name of the Stack</th><th>Date</th><th>O2 %</th><th>CO (ppm)</th><th>CO2 %</th></tr>
<tr><td>Unit-02</td><td>25.06.2025</td><td>9.43</td><td>0.0</td><td>9.73</td></tr>
<tr><td>Unit-03</td><td>25.06.2025</td><td>7.05</td><td>2.0</td><td>11.88</td></tr>
<tr><td>Unit-04</td><td>26.06.2025</td><td>9.08</td><td>0.0</td><td>10.07</td></tr>
</table></td></tr>
<tr><td>7.</td><td>Increase in solar power harnessing</td><td>In addition to proposed roof top solar plant of 4 MW, we will also explore the floating solar plant option in water reservoir to achieve cumulative capacity of 10 MW.</td></tr>
<tr><td>8.</td><td>Land for the plant</td><td>As per the land break-up submitted, the total land extent acquired by KMPCL is 840.92 Ha which is under our possession and converted into industrial use. However, the land utilised for the installation of 6x600 MW TPP is 828.46 ha. and the same has been applied for grant of EC. (EC dated 23/09/2015). The difference in land extent is in possession of KMPCL.
Land document which was submitted along with the Part C is submitted.</td></tr>
</table>

Observations and deliberation of the EAC

28.1.23: The Committee observed and noted the following:

i. Instant proposal is for seeking fresh Environmental Clearance for 3x600 MW (unit no 1,5&6) to complete the commissioning of the constructed facilities as per MoEF&CC notification S.O. 1247 (E) dated 18/03/2021 which states that *"where construction and commissioning of proposed activities have not been completed within the validity period of the Environmental Clearance (EC) and a fresh application for EC has been submitted due to expiry of the said period of the EC, the concerned Expert Appraisal Committee or State Level Expert Committee, as the case may be, may exempt the requirement of public hearing subject to the condition that the project has been implemented* ***not less than fifty percentage in its physical form or construction".***

ii. The physical progress report of 3x600MW TPP (Unit No. 1,5&6) is reported to be about 67.14%.

iii. The existing project was accorded Environmental clearance vide letter dated 19/10/2009 Out of 6x600MW, 3x600 MW (Unit-2, Unit-3 and Unit-4) coal based sub-critical thermal power plant has already been commissioned during 2013 and 2018 and units are fully operational at present. Consent to Operate for 3 x 600 MW (Unit

2,3 & 4) was accorded by Chhattisgarh Environment Conservation Board, Raipur vide letter no 903/TS/CECB/2024 dated 29/04/2024 with validity up to 17/05/2026. The balance 3x600 MW (Unit-1, Unit-5, and Unit-6) coal based sub-critical thermal power plant was under construction and the construction activities were suspended (before October 2019) due to financial constraints. The construction activities related to Unit No. 1, 5 & 6 was completed to the extent of 67.14%. Further, KMPCL has obtained Structural Stability Certificate from the Expert approved by Chief Inspector of factories, Govt. of Chhattisgarh. It is certified that the present existing structures of Unit1, 5 & 6 are structurally stable and suitable for continuation of work towards completion.

iv. The EAC also took into consideration the drone survey of the project site and KML file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH portal.

v. There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site as ascertained from DSS. However, two ASI monuments namely Mud Fort Kotagarh at 9.55km in the NNE and Mud Fort at Kotmi, 8.11 km- NNW are located within the study area.

vi. The project site is not located within the Critically Polluted Area (CPA) / Severally Polluted Area (SPA) as per CEPI assessment 2018 of CPCB.

vii. The Status of compliance of EC (for unit 3×600MW) was obtained from Regional Office, Raipur, MoEF&CC on 05.06.2025 by RO, Raipur. The Action taken report regarding the partially/non-complied conditions has been submitted to RO, MoEF&CC, Raipur vide letter dated 09.06.2025. The report has been deliberated by the committee and found it satisfactory. With respect to the non-applicable conditions of existing EC, proponent shall seek for amendment in the EC dated 19/10/2009.

viii. As per the categorization list of CPCB dated 23/06/2022, the existing units (No. 2, 3 & 4) falls under Category C. The balance under constructed Units -1,5 & 6 of KMPCL are located within the same premises and do not fall within any CPA nor in any non-attainment cities as per MoEF &CC notification G.S.R. 465(E) dated 11/07/2025. Hence, it is also classified as C-Category project with respect to FGD installation.

ix. ToR was granted vide letter dated 27.06.2022. PH was exempted by the EAC as per S.O. 1247(E) dated 18.03.3021. However, public consultation through written responses has been prescribed.

x. Total land of 828.46 ha is required for the project. The land is already under the possession of M/s KMPCL. The proposed expansion is within the plant premises area and no additional land acquisition is envisaged for the proposed expansion project.

xi. There is no involvement of forestland. There is no RF/PF within the study area and the same has been certified by DFO, Janjgir, Champa vide letter dated 10/04/2008.

xii. Total 7 Schedule I Species found in the buffer zone during field survey and secondary sources. Wildlife and conservation plan for schedule I species prepared by Southern Enviro Engineers Private Limited, Hyderabad submitted for approval to PCCF, Raipur (Wild Life) on 08.04.2025.

xiii. Lilagarh River is located at 5.1 km from the project boundary. Lilagarh River HFL is 243.7 m above MSL as per the letter from Irrigation Dept dt. 06.06.2025. Plant

elevation is 271-292 m above MSL. The project site is located at substantial higher elevation compared to the HFL of the river.

xiv. Total fresh water requirement is 8666 m3/hr (80 MCM). Approval for drawing 100 MCM of water for all 6 units from River Mahanadi has been obtained from Irrigation department, Chhattisgarh state vide letter dated 23.06.2008 and 15.10.2009. The water will be transported to the plant site through pipeline.

xv. 2 stacks of 275-m each with tri flue are existing. Boilers of Unit 1,2 & 3 are connected to one stack and boilers of Unit-4,5 & 6 are connected to another stack. Utilisation of existing stacks without FGD (as per notification dated 11.07.2025) with Hybrid ESP & with NOx control through Low NOx burners and SOFA is proposed.

xvi. Zero Liquid Discharge system will be adopted.

xvii. Transportation of coal will be done 100% by rail. In case of exigency on account of limitations of rake/ Coal India issues, up to 10% of the coal will be transported via Road.

xviii. Existing green belt has been developed in 277 ha area which is about 33.4 % of the total project area of 828.46 ha .7,20,000 plants were planted and 6,47,250 plants have survived (90%) as verified by " Society For Environment & Integrated Development", Raipur (CECB Approved). It is further proposed to plant some more saplings under gap plantation so as to reach 100% survival rate in next 2 years. In addition, as per the approved ToR, KMPCL has identified 2 Ha of land within the plant premises for raising additional plantation through Miyawaki plantation technique during 2025-26 and 2026-27. As per the EC condition of EC dated 13.08.2021, addition area of 50-Ha has been identified and green belt will be developed in next 5 years period @ 2500 saplings/Ha.

xix. The Ash will be collected in dry form in silos for further utilization/transportation through rail wagons / closed trucks to adjacent Cement Plants. 100% Ash will be utilized as per Ash Notification dated 31/12/2021.

xx. The existing ash dyke situated in an area of 66 Ha. No new ash dyke is envisaged for the proposed expansion.

xxi. 26 written representation have been received through public consultation. The issues stated in the said representations are Employment, Hospital & School, College for Girls, Road Traffic and Coal & Ash Transportation etc. Proponent has earmarked an amount of Rs. 23 crores to address the said concerns.

xxii. The capital cost of the proposed project is Rs 8,100 Crores and the capital cost for environmental protection measures is proposed as Rs 851.6 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 39.4 Crores. The employment generation from the proposed project / expansion is approx. 400 during operation and 2000 during construction.

xxiii. The Committee deliberated on the baseline data and incremental GLC due to the proposed project. The committee noted that the proponent is providing Electrostatic Precipitator (ESP), Low Nox Burner, SOFA technology and Dust Extraction & Suppression System to control the emission of Particulate matter and NOx and also stack with a height of 275 m will be provided to control & regulate the air emission from the proposed project.

xxiv. Committee deliberated on the action plan of Hydrogeology study; Bio-

diversity/aquatic ecology study and Risk assessment study and found it satisfactory.

xxv. The committee noted that with respect to water pollution control, domestic wastewater will be treated in Sewage treatment plant and treated sewage water shall be reused. Effluent will be treated in ETP. There will be no effluent discharge from the premises, hence the ZLD will be maintained. A state-of-the-art roof top rain water harvesting system will be provided to collect the run -off for ground water recharging.

xxvi. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components.

xxvii. There is one court case bearing number OA 152 /2016 National Green Tribunal, Bhopal (Central Zone), Sudiep Shrivastava Vs State of Chattisgarh, NHAI & others wherein KMPCL has been impleaded as Respondent No. 10. The matter is related to ash utilization and the same is yet to be heard by the Hon'ble Tribunal.

xxviii. No court cases and show cause notices related to Environment are pending against the proposed project.

xxix. The EAC also deliberated on the written submission of the project proponent and found it satisfactory.

xxx. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

Recommendations of the Committee:

28.1.24: In view of the foregoing and after detailed deliberations, the committee ***recommended*** the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 **subject to uploading of written submission** on PARIVESH Portal and stipulation of the following specific conditions and general conditions based on project specific requirements:

A. Specific conditions

[A] Environmental Management

1) The project proponent shall abide by all orders and judicial pronouncements, made from time to time by the OA 152 /2016 National Green Tribunal, Bhopal (Central Zone).
2) Project proponent shall ensure that 100% utilization of ash generated from unit no 1, 5&6 (3x600MW) in accordance with the ash utilization notification dated 31/12/2021 and its subsequent amendment. No additional ash pond is permitted for the proposed expansion and existing ash dyke of 66 Ha shall be utilized for temporary ash disposal as committed.
3) In addition to the existing 4 Continuous Ambient Air Quality Monitoring Stations (CAAQMS), Project proponent shall install additional one continuous ambient air quality monitoring at suitable locations in and around project site in consultation with CECB within six months from the date of grant of EC.

4) PP shall obtain amendment in the condition no. xi and xxxvi of the existing EC dated 19/10/2009 and its subsequent amendments as committed within the time frame of three months from the date of grant of expansion EC.
5) Project proponent shall comply with the recommendations made in the biodiversity assessment report and Hydrogeology report in a time bound manner. Compliance status in this regard shall be submitted to the Regional Office of MoEF&CC along with the six monthly compliance report.
6) The water requirement for unit no. 1, 5 & 6 is estimated as 8666 m^3/hr and the same shall be met from Mahanadi River. The specific water consumption for unit 1,5&6 shall be less than 3.0 m^3/MWhr.
7) The entire coal requirement for 3 units of TPP (3x600 MW) shall be transported by rail network only and no road transportation is permitted except exigency on account of limitations of rake/ Coal India issues, up to 10% of the coal shall be transported via Road.
8) Project proponent shall store harvested rainwater in the project boundary and utilize the same for plantation, recharging water in the pond and domestic utilization in colonies. A record shall be maintained of water collected through rainwater and its supply system. PP shall get the water audit done every year to optimize the water requirement.
9) Project proponent shall implement the protective measure proposed in EMP in a time-bound manner. The budget earmarked for the same is Rs. 851.6 crores and should be kept in separate accounts and audited annually. The implementation status along with the amount spent with documentary proof shall be submitted to the concerned Regional Office for the activities carried out during the previous year.
10) Project proponent shall assess the carbon footprint of the project and develop carbon sink/carbon sequestration resources using modern technologies. The implementation report shall be submitted to the concerned Regional Office of the MoEF&CC.
11) Project proponent shall ensure that diesel operated vehicles will be switched over to E-Vehicles / CNG vehicles in a time bound manner, replace the passenger vehicles to E/ CNG vehicle in phased manner. Further, for local movement of officials, Contract of Vehicles deployment shall be awarded to Project affected people and all efforts for adopting heavy E-vehicles/ CNG Vehicles like Bulkers for ash transportation for short distance subject to availability of such E-vehicle and adequate charging infrastructure in the surrounding area shall be provided. PP shall submit the action taken report to concerned RO with amount spent, photographs (before & after), number of such non diesel vehicles deployed etc. in six monthly compliance report.
12) The Project Proponent shall provide stack of 275 meters height and shall abide by the provisions of the notification number G.S.R 465 (E) dated 11/07/2025 related to FGD.
13) Project proponent shall ensure that pipelines carrying the fly ash and effluent shall be inspected regularly for any leakages.
14) Effluent of 22128 KLD (922 m^3/hr) will be treated through Effluent Treatment Plant. As committed by the Project proponent, Zero liquid discharge shall be adopted for the existing and the proposed plant. No wastewater will be discharged outside the project site.
15) PP shall implement the concurrent plantation plan in a time bound manner. Total of 277 ha area (33% of total area of 828.46 ha) will be developed as greenbelt. A 5 m - 50 m wide (min 25 m) greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. PP shall also adopt Miyawaki plantation technique and plantation with minimum 2 m height of the saplings in upcoming monsoon season in an area of 2 Ha. In addition, an area of 50-

Ha has been identified and green belt will be developed in next 5 years period @ 2500 saplings/Ha. Hence, total area of green belt would be 329 Ha. The budget earmarked for the green belt plantation including Miyawaki Plantation area shall be kept in a separate account and audited annually. PP should annually submit the audited statement of expenditure along with proof of activities viz. photographs (before & after with geo-location date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC and on PARIVESH Portal as the case may be for the activities carried out during previous year.

16) Project proponent shall carry out community plantation with incentive scheme by distributing 50,000 saplings per year for a period of five years. Further, PP shall provide basic facilities to the nearby schools such as drinking water, sanitation facilities (sanitary napkin vending machines) and shall also develop green belt around the nearby schools. Further, PP shall organize quarterly awareness programs for school students to educate them on the significance and preservation of trees.
17) Wildlife conservation plan as approved by the competent authority shall be implemented. Additional, budget shall be added in the plan, in case additional measures suggested by state wildlife department. The final Wildlife conservation plan duly approved by the CWLW shall be submitted to RO, MoEF&CC within a time frame of three months from the date of grant of EC and the budget approved by the concerned authority shall be deposited in a government account.
18) Project proponent shall install LED display of air quality (Continuous AAQ monitoring) and stack emission (Continuous emission monitoring) at prominent locations preferably outside the plant's main entrance for public viewing and in administrative complex and maintenance of devices shall be done regularly.
19) Project proponent shall carry out Water Sprinkling on roads inside the plant area/ administrative/ residential areas and outside the plant area at least for 2 KM on a regular basis to control the air pollution. A logbook shall be maintained for the activity and be in six-monthly compliance report.
20) PP shall deploy vacuum based vehicle for everyday cleaning of the road in and around plant site at least for 5 KM.
21) Environment Audit of plant shall be done annually and report shall be submitted to Regional office of the Ministry.
22) A detailed action plan regarding leachate handling shall be prepared and implemented in consultation with SPCB and the same shall be submitted to the Regional Office of the Ministry. Leachate shall be treated and reused. No treated leachate shall be discharged in any circumstances. Characteristics of Leachate and the treated leachate shall be monitored once in quarter and records shall be maintained.
23) Oil and grease recovered from the treatment plant should be disposed only through authorized recyclers.
24) Monitoring of surface water quality and Ground Water quality shall also be regularly conducted in and around the project site and records to be maintained. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall also be undertaken and results/findings submitted along with half yearly monitoring report. The monitored data shall be submitted regularly on PARIVESH portal as part of Half Yearly compliance report
25) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.

26) PP shall ensure that all types of plastic waste generated from the plant shall be stored separately in isolated area and disposed of strictly adhering to the Plastic Waste Management Rules 2016 (as amended). In pursuant to the Ministry's OM dated 18/07/2022. PP shall also create awareness among the people working in the project area as well as in its surrounding area on the ban on Single Use Plastic (SUP) in order to ensure compliance of Ministry's Notification published by the Ministry on 12/08/2021. A report along with photograph on the measures taken shall also be included in the six monthly compliance report submitted by PP.
27) PP is advised to implement the '***Ek Ped Maa Ke Naam***' Campaign which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than Green belt development. The action in this regard shall be submitted concerned RO in six monthly report.

[B] Socio-economic

1. A vision document comprising prospective plan for implementation of various CER activities, plantation programme outside the project cover area, rejuvenation and conservation of water bodies within 5 km radius of the project cover area shall be prepared and submitted to the Regional Office of the Ministry within 6 months. Implementation status of the same shall be reported to the Regional office in 6 monthly compliance report.
2. Epidemiological Study among population within 5 km radius of project cover area shall be carried out on regular interval (Once in two year) through independent agency. Necessary measures shall be taken as per findings of study in consultation with district administration. Action taken report shall be submitted to the Regional Office of the Ministry.
3. The budget proposed for PH is Rs. 23 Crores. The budget proposed shall be kept in a separate account and audited annually. Project proponent shall implement the action plan to address the issues raised during public hearing within a time frame of 3 years from the date of grant of EC. In addition to this, PP shall strengthen the existing Primary Health Center (PHC) & Community Health Center (CHC) in the study area for better public health as committed. Compliance status in this regard shall be submitted along with the six monthly compliance to the concerned Regional Office of MoEF&CC.
4. The establishment of a robust public grievance redressal mechanism to address concerns and complaints from local communities regarding the power plant's operations, environmental impacts, or social issues shall be developed. A Senior Officer shall review the functioning of the mechanism twice in a month.

[C] Miscellaneous

1. An Environmental Cell headed by the Environment Manager with postgraduate qualification in environmental science/environmental engineering, shall be created. It shall be ensured that the Head of the Cell shall directly report to the Head of the Plant who would be accountable for implementation of environmental regulations and social impact improvement/mitigation measures.
2. Consent for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
3. All necessary clearance from the concerned Authority, as may be applicable should be

obtained prior to commencement of project or activity.

B. General conditions

A. Statutory compliance:

1. Emission Standards for Thermal Power Plants as per Ministry's Notification S.O. 3305 (E) dated 7.12.2015, G.S.R.593 (E) dated 28.6.2018 and as amended from time to time shall be complied.
2. Part C of Schedule II of Municipal Solid Wastes Rules, 2016 dated 08.04.2016 as amended from time to time shall be complied for power plants based on Municipal Solid Waste.
3. MoEF&CC Notifications on Water Consumption vide Notification No. S.O. 3305 (E) dated 07.12.2015 read with G.S.R 593 (E) dated 28.6.2018 as amended from time to time shall be complied.
4. The recommendation from Standing Committee of NBWL under the Wildlife (Protection) Act, 1972 should be obtained, if applicable.
5. No Objection Certificate from Ministry of Civil Aviation be obtained for installation of requisite chimney height and its siting criteria for height clearance.

B. Ash content/ mode of transportation of coal:

1. MoEF&CC Notification issued vide S.O. 1561 (E) dated 21.05.2020 and as amended from time to time shall be complied which inter-alia include use of coal by Thermal Power Plants, without stipulations as regards ash content or distance, shall be permitted subject to compliance of conditions prescribed under (1) Setting Up Technology Solution for emission norms, (2) Management of Ash Ponds and (3) Transportation.

C. Air quality monitoring and Management:

1. Project proponent shall abide by the provisions of the notification number G.S.R 465(E) dated 11/07/2025 related to FGD.
2. Low NO_X Burners with Over Fire Air (OFA) system shall be installed to achieve NO_X emission standard of 100 mg/Nm^3.
3. High efficiency Electrostatic Precipitators (ESPs) shall be installed in each unit to ensure that particulate matter (PM) emission to meet the stipulated standards of 30 mg/Nm^3.
4. Stack with a height of 275 meters shall be provided with continuous online monitoring instruments for SO_2, Nox and Particulate Matter as per extant rules.
5. Exit velocity of flue gases shall not be less than 20-25 m/s. Mercury emissions from stack shall also be monitored periodically.
6. Continuous Ambient Air Quality monitoring system shall be set up to monitor common/criteria pollutants from the flue gases such as PM_{10}, $PM_{2.5}$, SO_2, NO_X within the plant area at five locations. The monitoring of other locations (at least three locations outside the plant area covering upwind and downwind directions at an angle of 120° each) shall be carried out manually.
7. Adequate dust extraction/suppression system shall be installed in coal handling, ash handling areas and material transfer points to control fugitive emissions.

8. Appropriate Air Pollution Control measures (Des/DSs) be provided at all the dust generating sources including sufficient water sprinkling arrangements at various locations viz., roads, excavation sites, crusher plants, transfer points, loading and unloading areas, etc.

D. Noise pollution and its control measures:

1. The Ambient Noise levels shall meet the standards prescribed as per the Noise Pollution (Regulation and Control) Rules, 2000.
2. Persons exposed to high noise generating equipment shall use Personal Protective Equipment (PPE) like earplugs/ear muffs, etc.
3. Periodical medical examination on hearing loss shall be carried out for all the workers and maintain audiometric record and for treatment of any hearing loss including rotating to non-noisy/less noisy areas.

E. Human Health Environment:

1. Bi-annual Health check-up of all the workers is to be conducted. The Occupational health study shall take into account of chronic exposure to noise which may lead to adverse effects like increase in heart rate and blood pressure, hypertension and peripheral vasoconstriction and thus increased peripheral vascular resistance. Similarly, the study shall also assess the health impacts due to air polluting agents.
2. Impact of operation of power plant on agricultural crops, large water bodies (as applicable) once in two years by engaging an institute of repute. The study shall also include impact due to heavy metals associated with emission from power plant.

F. Water quality monitoring and Management:

1. Induced/Natural draft closed cycle wet cooling system including cooling towers shall be set up with minimum Cycles of Concentration (COC) of 5.0 or above for power plants using fresh water to achieve specific water consumption of 3.0 m^3/MWhr.
2. In case of the water withdrawal from river, a minimum flow 15% of the average flow of 120 consecutive leanest days should be maintained for environmental flow whichever is higher, to be released during the lean season after water withdrawal for proposed power plant.
3. Records pertaining to measurements of daily water withdrawal and river flows (obtained from Irrigation Department/Water Resources Department) immediately upstream and downstream of withdrawal site shall be maintained.
4. Regular (at least once in six months) monitoring of groundwater quality in and around the ash pond area including presence of heavy metals (Hg, Cr, As, Pb, etc.) shall be carried out as per CPCB guidelines. Surface water quality monitoring shall be undertaken for major surface water bodies as per the EMP. The data so obtained should be compared with the baseline data so as to ensure that the groundwater and surface water quality is not adversely impacted due to the project & its activities.
5. The treated effluents emanating from the different processes such as DM plant, boiler blow down, ash pond/dyke, sewage, etc. conforming to the prescribed standards shall be re-circulated and reused. Sludge/ rejects will be disposed in accordance with the Hazardous Waste Management Rules.

6. Hot water dispensed from the condenser should be adequately cooled to ensure the temperature of the released surface water is not more than 5 degrees Celsius above the temperature of the intake water.
7. Wastewater generation of 22128 KLD (922 m^3/hr) from various sources (viz. cooling tower blow down, boiler blow down, wastewater from ash handling, etc) shall be treated to meet the standards of pH: 6.5-8.5; Total Suspended Solids: 100 mg/l; Oil & Grease: 20 mg/l; Copper: 1 mg/l; Iron:1 mg/l; Free Chlorine: 0.5; Zinc: 1.0 mg/l; Total Chromium: 0.2 mg/l; Phosphate: 5.0 mg/l.
8. Sewage generation of 400 KLD will be treated by setting up Sewage Treatment plant to maintain the treated sewage characteristics of pH: 6.5-9.0; Bio-Chemical Oxygen Demand (BOD): 30 mg/l; Total Suspended Solids: 100 mg/l; Fecal Coliforms (Most Probable Number).
9. Action plan by the TPPs located within 50 km of a municipality or any Urban Local Body (ULB) to use the treated sewage water produced by the municipality/Urban Local Body(ULB) to reduce fresh water consumption shall be submitted.

G. Risk Mitigation and Disaster Management:

1. Adequate safety measures and environmental safeguards shall be provided in the plant area to control spontaneous fires in coal yard, especially during dry and humid season.
2. Storage facilities for auxiliary liquid fuel such as LDO and HFO/LSHS shall be made as per the extant rules in the plant area in accordance with the directives of Petroleum & Explosives Safety Organisation (PESO). Sulphur Content in the liquid fuel should not exceed 0.5%.
3. Ergonomic working conditions with First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
4. Safety management plan based on Risk Assessment shall be prepared to limit the risk exposure to the workers within the plant boundary.
5. Regular mock drills for on-site emergency management plan and Integrated Emergency Response System shall be developed for all kind of possible disaster situations.

H. Green belt and Biodiversity conservation:

1. Green belt shall be developed in an area of 33% of the total plant area with indigenous native tree species in accordance with CPCB guidelines. The green belt shall inter-alia cover an entire periphery of the plant. PP shall also adopt Miyawaki plantation technique and plantation with minimum 2 m height of the saplings in upcoming monsoon season in an area of 2 Ha. In addition, an area of 50-Ha has been identified and green belt will be developed in next 5 years period @ 2500 saplings/Ha. Hence, total area of green belt would be 329 Ha.
2. In-situ/ex-situ Conservation Plan for the conservation of flora and fauna should be prepared and implemented.
3. A 3 tier plantation with saplings of native and fruit species of 2 meter height shall be done on both side of the roads which will be used for the transportation of coal and fly ash.

I. Waste management:

1. Solid waste management should be planned in accordance with extant Solid Waste Management Rules, 2016.
2. Toxicity Characteristic Leachate Procedure (TCLP) test shall be conducted for any substance, potential of leaching heavy metals into the surrounding areas as well as into the groundwater.
3. Ash pond shall be lined with impervious liner as per the soil conditions. Adequate dam/dyke safety measures shall also be implemented to protect the ash dyke from getting breached.
4. Fly ash shall be collected in dry form and ash generated shall be used in phased manner as per provisions of the Notification on Ash Utilization issued by the Ministry S.O. 5481 dated 31.12.2021, S.O.6169 (E) dated 30.12.2021, S.O.05 (E) dated 01.01.2024 and amendment thereto.
5. Unutilized ash if any shall be disposed off in the ash pond in the form of High Concentration Slurry method.

J. Monitoring of compliance:

1. Environmental Audit of the project be taken up by the third party for preparation of Environmental Statement as per Form-V & Conditions stipulated in the EC and report be submitted to the Ministry.
2. Resettlement & Rehabilitation Plan as per the extant rules of Govt. of India and respective State Govt. shall be followed, if applicable.
3. Energy Conservation Plan to be implemented as envisaged in the EIA / EMP report. Renewable Energy Purchase Obligation as set by MoP/State Government shall be met either by establishing renewable energy power plant (such as solar, wind, etc.) or by purchasing Renewable Energy Certificates.
4. Energy and Water Audit shall be conducted at least once in two years and recommendations arising out of the Report should be followed. A report in this regard shall be submitted to Ministry's Regional Office.
5. The project proponent shall (Post-EC Monitoring):
    a. Send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government;
    b. Upload the clearance letter on the web site of the company as a part of information to the general public.
    c. Inform the public through advertisement within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forest and Climate Change (MoEF&CC) at http://parviesh.nic.in.
    d. Upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same periodically;
    e. Monitor the criteria pollutants level namely; PM (PM10 & PM2.5 in case of ambient AAQ), SO2, Nox (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company;

f. Submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB;
g. Submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company;
h. Inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project and the date of commencement of the land development work.

K. Corporate Environmental Responsibility (CER) activities:

1. CER activities will be carried out as per Ministry's OM F.No.22- 65/2017- IA.III dated 30th September, 2020 and 22-65/2017- IA.III dated 25.02.2021 or as proposed by the PP in reference to Public Hearing or as earmarked in the EIA/EMP report along with the detailed scheduled of implementation with appropriate budgeting.

Agenda No 28.2

28.2 Expansion of Existing 25 MW Waste to Energy (WTE) Plant to 45 MW by **M/s Tehkhand Waste to Electricity Project Limited** located at adjacent DTC Tehkhand, Depot, **Maa Anandmai Marg, District Southeast, New Delhi - Prescribing of Terms of Reference under para 7(ii) a of EIA Notification, 2006 – regarding.**

[Proposal no. IA/DL/THE/544398/2025, F.No. J-13012/03/2017-IA.I(T)]

28.2.1: M/s. Tehkhand Waste To Electricity Waste Project Limited (TWEWPL) has made an application online vide proposal no. IA/DL/THE/544398/2025 dated 21/07/2025 along with the application in prescribed format (CAF, Form – I Part A & B), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at item no. 1(d) Under Category "A" of the schedule of the EIA Notification, 2006 and also attracts general conditions due to proximity to protected area - Okhla Bird Sanctuary ESZ at 4.76 Km NE and Okhla Bird Sanctuary at 4.83 km NE, Asola Wildlife Sanctuary ESZ at 0.72 km SW & Asola Wildlife Sanctuary at 1.65 km SW & inter-state boundaries-Delhi-Haryana State boundary at 1.30 Km SE, and Okhla Industrial Area [Critically polluted area having CEPI score of 92.65] is located at 0.61 km North. Hence, the proposal is considered at Central Level.

28.2.2: The existing 25 MW WTE plant was accorded environmental clearance vide letter no. J-13012/03/2017-IA.I(T) dated 26.07.2018 from MoEF&CC. Public hearing for the project was held on 21/05/2018. Subsequently, EC amendment was accorded on 15.01.2019. Consent to Establish (CTE) was obtained from Delhi Pollution Control Committee (DPCC), vide File No. DPCC/WMC-II/Tehkhand-WTE/2018/3090 dated 31.01.2020 and subsequently renewed up to 25.02.2023. Consent to Operate (CTO) has been taken from Delhi Pollution Control Committee (DPCC), vide File No. DPCC/WMC-II/Tehkhand-WTE/2018/620-626, dated 07.10.2022 and subsequently renewed up to 06.10.2029.

28.2.3: Implementation status of the EC dated 26/07/2018

S. No.	Configuration	Capacity (MW)	As per the EC dated	Implementation Status as on July 2025	Production as per CTO
1	Product- Power Generation through MSW waste processing 2000 TPD	25	26/07/2018 & 15.01.2019 (Amendment in EC)	The project has been implemented in compliance with the EC conditions and is currently in operation after obtaining all necessary clearances and No Objection Certificates (NOCs) from concerned departments.	25MW

28.2.4: The unit configuration and capacity of existing and proposed project is given as below:

Name of the facility	Unit	Existing	Proposed Expansion*	Total after Expansion Capacity
Product (Waste to Energy Power)	MW	25	20	45
Biogas production (by-product)	Nm^3/day or TPD	Nil	Biogas = up to 20,000 Nm^3/day /CBG = up to 8 TPD	Biogas = up to20,000 Nm^3/day /CBG = up to 8 TPD
Boiler for WTE	TPH	2 x 65	≤100	≤230

Note*: As per the final EIA report submitted at the time of grant of EC during 26/07/2018 (Proposal No: IA/DL/THE/71979/2017), provision was indicated for future expansion in Figure 2.8 (Site Layout Plan) at Page No. 59 by depicting the third boiler in a grey outline. Instant expansion was envisaged at the time of applying of existing EC itself.

Process description

WTE plant

The technology proposed to be employed for this WTE project is RDF combustion based reciprocating forward feed grate technology. The power plant constitutes Material Recovery Facility (Pre-sorting), RDF fuel Pit, Incinerators, Boilers, and Steam Turbine Generators with power generation capacity of 20 MW.

Bio-gas plant

- Leachate Treatment Plant utilizes chemical and biological treatment methods to treat approximately 360 KL of leachate per day. The plant features three anaerobic digesters

operating in both series and parallel modes.

- Anaerobic (without oxygen) biological process that breaks down organic materials and release biogas.
- The Digestion takes about 20 days in the mesophilic temperature (30˚C-35˚C) and producing approx. 8000 to 20,000 Nm3 of biogas per day.
- Anaerobic digestion has four major steps: Hydrolysis, Acidogenesis, Acetogenesis & Methanogenesis to decompose the organic matter and produce biogas.
- Digested Sludge from the bottom can be used as manure.

CBG production

- Raw biogas will be filtered and cleaned to remove impurities like hydrogen sulphide, moisture, and particulate matter.
- Carbon dioxide and hydrogen sulphide gas will be removed from the biogas using scrubbing and absorption methods.
- The biogas is then enriched to increase the CH4 concentration, typically to 90-95%.
- The scrubbed biogas will be compressed to high pressure (typically 200- 250 bar) and filled into CBG cylinders or will be supplied to gas grid through pipeline.
- The final CBG / Bio-CNG product will meet specified standards for fuel quality, safety, and environmental regulations.

28.2.5: Environmental site settings

S.No.	Particulars	Details	Remarks
1	Total Land	6.0703 ha [The complete area is Government land obtained on lease from MCD]	Land use: The existing Land use of the project site is Industrial. There will be no change in the land use pattern of the site. As per Gazette Notification dated 12.01.2018, the land is already notified for utility purposes by the Delhi Development Authority. The land was transferred from DDA to MCD and then was handed over to M/s Tehkhand Waste to Electricity Project Limited through a lease deed agreement dated 25.09.2018.

<table>
<tr><th>S.No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>2</td><td>Land use break up</td><td>
<table>
<tr><th>Particulars</th><th>Existing (Ha)</th><th>Expansion (Ha)</th><th>Area upon expansion (Ha)</th></tr>
<tr><td>Covered area</td><td>2.2190</td><td>0.4664 (increased)</td><td>2.6854</td></tr>
<tr><td>Road area & drainage</td><td>1.0116</td><td>0 (will remain same)</td><td>1.0116</td></tr>
<tr><td>Green Area (33%)</td><td>2.0142</td><td>0 (will remain same)</td><td>2.0142</td></tr>
<tr><td>Open Area</td><td>0.8255</td><td>0.4664 (reduced by)</td><td>0.3591</td></tr>
<tr><td>Total Area</td><td>6.0703</td><td></td><td>6.0703</td></tr>
</table>
</td><td>No additional land is required. The proposed expansion will be implemented exclusively on the existing available land, without any reduction to the greenbelt area.</td></tr>
<tr><td>3</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014 & 20/2/2025</td><td>The land was transferred from DDA to MCD and then was handed over to M/s Tehkhand Waste to Electricity Project Limited through a lease deed agreement dated 25.09.2018.</td><td>Registration No. 5.302 dated 25.09.2018 and agreement is upto 25 years</td></tr>
<tr><td>4.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Project site: Not applicable
Study Area:
<table>
<tr><th>Name of Habitat</th><th>Distance (Km)</th><th>Direction</th></tr>
<tr><td>Railway Colony</td><td>0.41</td><td>SE</td></tr>
<tr><td>Prem Nagar</td><td>0.48</td><td>SSW</td></tr>
<tr><td>Pul Pehladpur</td><td>1.10</td><td>NNW</td></tr>
<tr><td>Tuglaqabad Village</td><td>1.37</td><td>NW</td></tr>
<tr><td>Tehkhand</td><td>1.39</td><td>NNE</td></tr>
<tr><td>Tuglaqabad Extension</td><td>2.54</td><td>NW</td></tr>
<tr><td>Sarita Vihar</td><td>2.58</td><td>NE</td></tr>
<tr><td>Tajpur Pahari</td><td>2.72</td><td>ESE</td></tr>
<tr><td>Talimabad</td><td>2.76</td><td>WNW</td></tr>
<tr><td>Govindpuri</td><td>3.24</td><td>NNW</td></tr>
<tr><td>Madanpur Khadar</td><td>3.53</td><td>NE</td></tr>
</table>
</td><td>Status of R&R. Not applicable</td></tr>
</table>

<table>
<tr><th>S.No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>Gupta Colony</td><td>3.79</td><td>SW</td></tr>
<tr><td>Jasola Vihar</td><td>4.19</td><td>NNE</td></tr>
<tr><td>Kalkaji</td><td>4.20</td><td>NNW</td></tr>
<tr><td>Mithapur</td><td>4.28</td><td>ESE</td></tr>
<tr><td>Sarai Khawaja Village</td><td>4.31</td><td>SE</td></tr>
<tr><td>Devli</td><td>4.34</td><td>SW</td></tr>
<tr><td>Sangam Vihar</td><td>4.38</td><td>W</td></tr>
<tr><td>Jaitpur</td><td>4.45</td><td>W</td></tr>
<tr><td>Dakshinpuri</td><td>4.46</td><td>WNW</td></tr>
<tr><td>Dr. Ambedkar Nagar</td><td>4.56</td><td>NW</td></tr>
<tr><td>Khanpur</td><td>4.64</td><td>W</td></tr>
<tr><td>GK II</td><td>4.67</td><td>NW</td></tr>
</table>
The nearest habitation is Tughlakabad Railway Colony 0.41 km, East. However there is no R & R involved in the said project. Hence Not applicable.
</td><td></td></tr>
<tr><td>5.</td><td>Existence of school and hospital if any.</td><td>
A. School
<table>
<tr><th>School</th><th>Distance</th><th>Direction</th></tr>
<tr><td>MCD Primary School (BOYS)</td><td>0.49 Km</td><td>SE</td></tr>
<tr><td>Apollo Public School</td><td>0.76 Km</td><td>SW</td></tr>
<tr><td>Government Girls Senior Secondary School</td><td>0.79 Km</td><td>ESE</td></tr>
<tr><td>Sky High Modern School</td><td>0.95 Km</td><td>WNW</td></tr>
<tr><td>MCD Primary School, Railway Colony</td><td>1.07 Km</td><td>ESE</td></tr>
<tr><td>New Sangam Public School</td><td>1.19 Km</td><td>W</td></tr>
<tr><td>Nav Jai bharti Public School</td><td>1.39 Km</td><td>SE</td></tr>
<tr><td>Manav Rachna International School Eros Garden,</td><td>1.43 Km</td><td>SSE</td></tr>
<tr><td>New Motherland Public School</td><td>1.56 Km</td><td>ESE</td></tr>
</table>
</td><td></td></tr>
</table>

S.No.	Particulars	Details	Remarks

Govt. Boys Sr. Sec. School No 1	1.67 Km	E
Bal Upwan Public School	1.86 Km	SE
Ramchander Memorial Public School	1.92 Km	SE
St. Columbus School	2.19 Km	SE
Saraswati Vidya Niketan Public School	2.39 Km	SE
Little wings play school	2.41 Km	SE
Ashiyan Public School Faridabad, New Delhi, Haryana 121009	2.46 Km	SSE
Kinderzone School	3.23 Km	SSE

B. Hospital

Hospital	Distance	Direction
OKHLA PH-I ESI Hospital	0.50 Km	NNE
MAX Lab	0.92 Km	SE
Tuglakabad Railway Health Unit N R Hospital	1.02 Km	ESE
Western Central Railway Hospitals	1.02 Km	ESE
Jeewan Jyoti Hospital	1.21 Km	NNE
Jain Charitable Hospital	1.24 Km	SE
Sarvopari Hospital	1.56 Km	SE
Supreme Hospital	1.98 Km	SE
BTPS Hospital	2.03 Km	East
ECHS Polyclinic Hospital	2.44 Km	WNW
Health City Clinic Landmark	2.70 Km	ESE
Majeedia Unani Hospital	2.77 Km	WNW
Hakeem Abdul Hameed Centenary Hospital	2.78 Km	WNW
Unity Hospital	3.11 Km	SE
Batra Hospital & Medical Research Centre	3.35 Km	WNW
Universal Hospital DND	3.41 Km	SE

<table>
<tr><th>S.No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>6.</td><td>Latitude and Longitude of all corners of the project site.</td><td>Plant site
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>28°30'35.37"N</td><td>77°16'50.82"E</td></tr>
<tr><td>B</td><td>28°30'32.41"N</td><td>77°16'56.59"E</td></tr>
<tr><td>C</td><td>28°30'22.99"N</td><td>77°16'51.15"E</td></tr>
<tr><td>D</td><td>28°30'25.49"N</td><td>77°16'44.93"E</td></tr>
</table></td><td></td></tr>
<tr><td>7</td><td>Elevation of the project site</td><td>258 meters above mean sea level</td><td></td></tr>
<tr><td>8</td><td>Involvement of Forest land if any</td><td>Status of stage I Forest Clearance: Not applicable
Area of the forest land involved: Nil</td><td>Not applicable</td></tr>
<tr><td>9</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as
study area</td><td>Project site: There are no water body within the project site
Study area -The following are within 5km radius from the project site
<table>
<tr><th>Water body</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Pond Near Prem Nagar</td><td>0.51 Km</td><td>West</td></tr>
<tr><td>Pond Near Chugi No 2</td><td>0.57 Km</td><td>SSW</td></tr>
<tr><td>Hari Singh Pond</td><td>0.60 Km</td><td>W</td></tr>
<tr><td>Pond Near Tughlakabad District Park</td><td>1.00 Km</td><td>W</td></tr>
<tr><td>Pond Near Tughlakabad Fort Pond</td><td>1.03 Km</td><td>WSW</td></tr>
<tr><td>Pond Near Tughlakabad</td><td>1.10 Km</td><td>NNW</td></tr>
<tr><td>Pond Near Laal Kuwa</td><td>1.15 Km</td><td>SE</td></tr>
<tr><td>Pond Near Gali No1</td><td>1.39 Km</td><td>SSW</td></tr>
<tr><td>Drain near Okhala Phase 2</td><td>1.60 Km</td><td>N</td></tr>
<tr><td>Suraj Kund</td><td>2.46 Km</td><td>S</td></tr>
<tr><td>Pond near Kakkurpur</td><td>2.77 Km</td><td>SE</td></tr>
<tr><td>Agra Canal</td><td>2.86 Km</td><td>NE</td></tr>
<tr><td>Gurgaon Canal Feeder</td><td>3.00 Km</td><td>E</td></tr>
<tr><td>Gurukul Lake</td><td>3.34 Km</td><td>SSE</td></tr>
</table></td><td></td></tr>
</table>

<table>
<tr><th>S.No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>Drain near Khanpur</td><td>4.07 Km</td><td>WNW</td></tr>
<tr><td>Sehatpur Drain</td><td>4.23 Km</td><td>SE</td></tr>
<tr><td>Drain near Abdulfazal Enclave</td><td>4.28 Km</td><td>N</td></tr>
<tr><td>Pond near Mithapur Extension</td><td>4.53 Km</td><td>ESE</td></tr>
<tr><td>Drain near Jasaula Vihar</td><td>4.87 Km</td><td>N</td></tr>
<tr><td>Yamuna River</td><td>4.98 Km</td><td>NE</td></tr>
</table>
</td><td></td></tr>
<tr><td>10</td><td>Archaeological sites monuments/ historical temples etc.</td><td>The following Archaeological Sites are in the radius of 2 km from the project site:
<table>
<tr><th>Name</th><th>Distance Direction</th></tr>
<tr><td>Nai-ka-kot in Tughlaqabad</td><td>0.44 km SW</td></tr>
<tr><td>Walls, gate and bastions of Adilabad (Mohammadabad) and causeway leading there to from Tughlakabad</td><td>1.18 km SW</td></tr>
<tr><td>Tomb of Ghiyasuddin Tughlakabad</td><td>1.76 km West</td></tr>
</table>
</td><td></td></tr>
<tr><td>11</td><td>Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area</td><td>Study area Name & Distance of the ESZ/ESA:
a) Asola Wildlife Sanctuary ESZ is located at 0.72 km SW & Asola Wildlife Sanctuary is located at 1.65 km SW.
b) Okhla Bird Sanctuary ESZ is located at 4.76 Km NE and Okhla Bird Sanctuary is located at 4.83 km NE
Status of Notification:
a) Gazette Notification for ESZ & WLS of Asola Wildlife Sanctuary published in 2017
b) Gazette Notification for ESZ & WLS of Okhla Bird Sanctuary published in 2015
Authenticated map of ESZ projecting distance of ESZ from project site has been submitted.
Status of NBWL approval: Not applicable

List of Reserved and Protected Forests:
<table>
<tr><th>Forest Type</th><th>Name</th><th>Distance & Direction</th></tr>
<tr><td>Reserved Forest</td><td>Jahanpanah City Forest</td><td>2.78 km in WNW</td></tr>
</table>
</td><td></td></tr>
</table>

S.No.	Particulars	Details	Remarks
12	Facility envisaged in CRZ area (Only for coastal power plant)	Name of the facility in CRZ area: Nil Recommendations of CZMA: **Not applicable** Status of CRZ clearance: **Not applicable**	-
13	Involvement of Critically Polluted Area/Severely. Polluted area as per 2018 CEPI score	Involvement of CPA/SPA-No (a) Critically Polluted-**Not Applicable** (b) Proximity to CPA - **Okhla Industrial Area is located at 0.61 Km North** [Critically polluted area having CEPI score of 92.65]	Proponent will submit action plan to comply with the additional environmental safeguard as per MoEF&CC O.M. dated 31/10/2019.

28.2.6: The details of the municipal solid waste requirement for the existing project and proposed expansion project along with its source and mode of transportation, is given as below:

Details	Fuel Requirement (MTPA)	Source	Distance from site (Kms)	Mode of transportation	Linkage Document
Existing WtE	Municipal Solid Waste-7,30,000	MCD	5-10 Km	Trucks and dumpers	Concession agreement between MCD and TWEPL
Proposed WtE	Municipal Solid Waste-3,65,000	MCD	5-10 Km	Trucks and dumpers	

28.2.7: The Existing Water requirement is 490 m^3/day, water requirement is obtained by treated water from Okhla STP and permission for the same has been obtained from Delhi Jal Board vide letter no. F-1/DJB/EE(SDW)V/2017/1346 dated 13.10.2017 The water requirement for the proposed project is estimated as 632 m^3/day, out of which 7 m^3/day, of fresh water requirement will be obtained from the DJB pipeline supply and the remaining requirement of 625 m^3 /day will be met from the treated water from Okhla STP and inhouse treated water. The water will be transported to the plant site through pipelines.

28.2.8: The existing power requirement of 3.5 MW is obtained from Inhouse (WtE Plant). .The power requirement for the proposed project is estimated as 2.8 MW, which will be obtained from the Inhouse (WtE Plant).

28.2.9: The details of solid and hazardous waste generation along with its mode of

treatment/disposal is furnished as below:

Type of Waste	Source	Existing	Expansion	Total	Disposal Method
Recyclable (Ferrous & Non ferrous)	Process	2.5 MT/day (Avg. actual)	1.5 MT/day	4 MT/day	Will be sold to registered recyclers
Manure (from composting)	Process	-	2 MT/day	2 MT/day	Used as compost/soil conditioner
Bottom Ash	Process	230 MT/day (Avg. actual)	80 MT/day	310 MT/day	Ash Generated is utilized in road subgrade construction and embankment. Any unutilized material will be sent to SLF* located adjacent to the project site.
Fly Ash	Process	27 MT/day	20 MT/day	47 MT/day	Supplied to ash brick manufacturers and any unutilized material will be sent to SLF* located adjacent to the project site.
Inert	Process	300 MT/day (Avg. actual)	144 MT/day	444 MT/day	Used for road construction and any material will be sent to SLF* located adjacent to the project site.
Used Oil	Machineries	4 MT/year	3 MT /year	7 MT/day	Will be sold to registered recyclers
Domestic Solid Waste	Staff	25 kg/day	7 kg/day	32 kg/day	Will be incinerated in- house boilers

Note: Ash + inert may vary 15 to 26% of the total MSW received.

**** Note – There is a SLF located adjacent to WTE site which is owned by Municipal Corporation of Delhi for which EC was accorded by the Ministry on 29/10/2018. This SLF is an interdependent projects or activities for the proposed WTE expansion as MSW from SLF will be sent to WTE for treatment and waste (ash & inert) from WTE will be sent to SLF for disposal.***

28.2.10: The total cost of the proposed expansion project is estimated Rs. 435 crores. For the existing project, the Environmental Management Plan (EMP) incurred a capital expenditure of Rs. 42.72 crores, and the annual recurring cost of approximately Rs. 5.65 Crores is dedicated towards the environmental protection measures. For the proposed expansion, the estimated capital cost for environmental safeguards is Rs. 1.97 crores, while the annual recurring cost is estimated Rs. 0.34 crores. The employment generation from the proposed project / expansion is 45 nos during the operation phase and 262 workers during the construction phase.

28.2.11: Ash management for the last three years

Type of Waste	Quantity generated (MT)	Quantity utilized (MT)	% of utilization	Balance quantity (MTP)	No. of storage silos with capacity
Bottom Ash	230 MT/day	230 MT/day	100%	0	Nil
Fly Ash	27 MT/day	27 MT/day	100%	0	2x250 m^3

i. Fly ash Details for last three years = 9983.5 TPA (Avg. FY 23-24 & 24-25)

S. No.	Activity (as applicable)	Quantity	Percentage	Remarks (Prior approval of SPCB details to be mentioned)
1	Fly ash based products (bricks or blocks or tiles or fibres cement sheets or pipes or boards or panels)	27 MT/day	100%	Supplied to ash brick manufacturers and any unrecyclable material will be sent to SLF.
	Total	**27 MT/day**	**100%**	**As per guidelines**

ii. Bottom ash generation for the last three years = 83947.5 TPA (Avg. FY 23-24 & 24-25)

S. No.	Activity (as applicable)	Quantity	Percentage	Remarks (Prior approval of SPCB details to be mentioned)
1	Construction of roads, road and fly over embarkment	230 MT/day	100%	As per guidelines
	Total	**230 MT/day**	**100%**	**As per guidelines**

iii. Legacy ash details-Not applicable

iv. Ash Pond details:-Not Applicable

v. Proposed ash utilization plan for expansion project

Details	Existing generation (MTPA)	Proposed generation (MTPA)	Total	Utilization (MTPA)	% of utilization	Balance quantity (MTPA)	No of storage silos with capacity
Bottom Ash	230 MT/day	80 MT/day	310 MT/day	310 MT/day	100%	Nil	Nil
Fly Ash	27	20	47	47	100%	Nil	2x250

	MT/day	MT/day	MT/day	MT/day			m3

Ash pond details: If an existing ash pond is to be utilized details may be mentioned. If not, new ash pond details may be provided as below: There is no ash pond in the project. Hence not applicable.

28.2.12: The project's greenbelt, which covers 2.01 hectares and constitutes 33% of the total 6.07 hectare of land area, has been established in accordance with CPCB guidelines. It features a three-tiered periphery with a width of 20-30 meters. The greenbelt includes a total of 6,219 native and local species of saplings and trees. Furthermore, an additional green cover of 0.5 acres (300 No's) has been developed outside the project boundary to create a green curtain.

28.2.13: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration – Nil

28.2.14: Name of the EIA consultant: M/s Perfact Enviro Solutions Pvt. Ltd. (An ISO 9001:2015 & ISO 14001:2015 Certified Company) with their Certificate / Extension Letter No-NABET/EIA/2225/RA 0284 (Rev.01); Valid up to 26.11.2025.

28.2.15: Proposed Terms of Reference (Baseline data collection period: March 2024 to May 2024-Summer season.

Attributes	**Parameters**	**Sampling**		**Remarks**
		No. of stations	**Frequency**	
A. Air	-	12	-	
a. Meteorological parameters	Temperature, Wind speed, Wind direction, humidity, rainfall, dry bulb temperature, wet bulb temperature, solar radiation	1	Daily	
b. AAQ parameters	PM_{10}, $PM_{2.5}$,SO_2, NO_2	12	-	
B. Noise	Leq Day time & Leq Night time	12	-	
C. Water	-	12 (@6 ground water & @6 Surface water)	-	
Surface water/Ground water quality parameters	Monitoring for parameters as per drinking water standard IS – 10500 **Ground water quality parameters:** Colour, Odour, Turbidity, Temperature, Conductivity, pH Value, Total Dissolved Solids, Chloride (as Cl), Fluoride (as F), Total Hardness, Alkalinity, Boron, Calcium,	12 (@6 ground water & @6 Surface water)	-	

Attributes	Parameters	Sampling		Remarks
		No. of stations	Frequency	
	Aluminum, Phosphorus, Magnesium (as Mg), Phosphate, Iron, Sulphate (as SO4), Nitrate as NO2 ,Chromium, Arsenic, ,Nickel, Manganese, Sodium (as Na), Copper, Potassium (as K), Cadmium, Lead, Total coliform, faecal coliform **Surface water quality parameters:** Total Carbon, Colour, Odour,Taste, Turbidity, Temperature, Conductivity, pH Value, Total Dissolved Solids, Chloride (as Cl), Fluoride (as F), Total Hardness, Total suspended solids, Calcium (as Ca), Aluminum, Total Phosphorus, Magnesium (as Mg), Iron, Sulphate (as SO4), Nitrate NO3, Chromium, Arsenic as As, Alkalinity CaCO3, Nickel, Sodium (as Na), Copper, Potassium (as K), Cadmium, Copper, Lead, Lithium, Zinc, BOD, COD, DO, Ammoniacal Nitrogen, Total coliform, Faecal Coliform			
D. Land				
a. Soil quality b. Land use	Qualitative and Quantitative Parameters to check soil fertility, Soil Quality Parameters: pH Value, Colour, Moisture content, Organic Matter, Electrical Conductivity, Available Nitrogen, Available Calcium, Available Magnesium, Potassium, Nitrate, Phosphorous Available, Available Chloride, Cation Exchange Capacity, Sulphur, Sodium, Phosphorous (Ortho), Bicarbonate Alkalinity, Texture (with Percentages of Sand, Silt and Clay), Bulk Density, Porosity.	10	-	
E. Biological a. Aquatic b. Terrestrial	The Primary survey of the site was conducted to check the flora and fauna of the core and the buffer area.	-	–	

28.2.16: Justification for considering proposal under para 7(ii) Aof EIA, 2006 (exemption for PH)

Proponent has requested for the waiver off public consultation as per the provisions contained under para 7(ii) a of EIA Notification, 2006 based on the following grounds:

- Proposed expansion of WTE was already envisaged under the proposal submitted for existing EC dated 26/07/2018. As per the final EIA report submitted at the time of grant of EC during 26/07/2018 (Proposal No: IA/DL/THE/71979/2017), provision was indicated for future expansion in Figure 2.8 (Site Layout Plan) at Page No. 59 by depicting the third boiler in a grey outline. Hence, instant expansion was envisaged at the time of applying of existing EC itself.
- Proposed expansion of WTE from 25 to 45 MW will be confined to the existing land of 6.0703 Ha only.
- 6.0703 Ha is already undergone public hearing process as per the provisions contained under EIA Notification, 2006 at the time of grant of EC during 26/07/2018.
- No reduction in green belt area of 2.01 Ha due to the proposed expansion of WTE.
- Proposed expansion will facilitate disposal of additional 1000 tons per day of Municipal Solid Waste.
- State Govt. of Delhi has initiated the neutralization of the waste dump site and the existing project is playing a key role in reducing the waste dumped into landfills by using Municipal Solid waste to generate power.
- Central Pollution Control Board (CPCB) has introduced a new "blue category" to classify industries providing Essential Environmental Services (EES) like waste management and pollution control. This category recognizes activities such as waste-to-energy plants, sewage treatment plants, and landfill maintenance, which are crucial for managing pollution from both domestic and industrial sources.
- Summary of pollution load for existing project vis-à-vis proposed expansion

Emission Load				
S. No.	**Pollutant**	**Existing Load (Kg/hr)**	**After Expansion Load (Kg/hr)**	**% Change**
1	PM	11.21	14.70	31.2
2	NOx	130.73	171.55	31.2
3	SO2	37.35	49.02	31.2
4	CO	37.35	49.02	31.2
5	Vehicular Emission (kg/day)	0.092	0.009	-90

Water pollution load (Kg/day)				
Parameters	**Existing**	**After Expansion**	**% Change**	**Remarks**
TSS	1.344	1.98	47.5	Increase
TDS	371.28	547.64	47.5	Increase
COD	4.8	7.08	47.5	Increase
BOD(3 days)	0.984	1.45	47.5	Increase

Waste Generation					
Type of Waste	**Unit**	**Permitted as per EC**	**Total After Expansion**	**% Change**	**Remarks**
Recyclable	MT/day	2	5	150.0	Increase
Manure (from composting)	MT/day	0	2	0.0	Increase
Bottom Ash	MT/day	230	310	34.8	Increase
Fly Ash	MT/day	27	47	74.1	Increase
Inert	MT/day	300	444	48.0	Increase
Domestic Solid Waste	Kg/day	25	32	28.0	Increase
Hazardous waste					
Type of Waste	**Unit**	**Permitted as per EC**	**Total After Expansion**	**% Change**	**Remarks**
Used Oil	MT/year	4	7	75.0	Increase

- Additional mitigation measures to be adopted

A. Treatment of the Flue Gas from the Boilers:

Existing Control Measures: There are 2 x 65 TPH (each) capacity of boilers installed at the existing plant, the flue gas from Boilers directed into the turbo-reactor via a venturi nozzle, creating a fluidized bed. The flue gas comes into turbulent contact with hydrated lime and activated carbon, which absorb SO_2, HCl and other acidic compounds, heavy metals, and dioxins & furans.

The remaining dust particles are carried with the flue gas into the baghouse filter through a central duct to chambers. The flue gas passes through filter bags, trapping solids on the outside of the bags, forming a filtration-aiding layer (filter cake). This process ensures the removal of particulate matter.

SNCR technology is installed for the control of NOx emission.

Proposed: The proposed Boiler of up to 100 TPH will be installed as the 3rd boiler with the Best available technology and State-of-the-art technology pollution control devices. The proposed bag filters will be designed with **130% capacity**, providing additional margin for efficient emission control.

B. Measures to be adopted during Construction Phase:

- Regular water sprinkling to mitigate fugitive emissions at the project site.
- Use of Anti-Smog Gun/Fog Cannon for nebulized water spray to control fine dust.
- Transportation of construction material in covered vehicles and proper packing conditions to avoid pollution due to transportation.
- Storing of construction material in covered condition at project site.
- Proper route management of the traffic for smooth ingress and egress of traffic.
- Monitoring of Ambient Air Quality at periodical intervals.
- Continuous Ambient Air Quality Monitoring Station (CAAQMS) already installed.
- Thick Plantation around the plant periphery has been done.

- Strict checking of PUC certificate compliance for all vehicles entering project/plant site
- Plantation of indoor fragrant plants & extensive green belt.

C. Measures for emissions from MSW Storage Pit:

Existing Measures

- The MSW storage pit is maintained under negative pressure. Outside air is allowed to enter the waste storage shed; however, malodorous emissions are not allowed to exit into the atmosphere.
- Odorous emissions containing gases such as methane, mercaptan, hydrogen sulphide, etc., are directed to the boiler furnace, where they are burnt.
- **Tolerant tree species** have been planted to act as natural sinks for pollutants and odour.
- Use of **fragrant agents** in the odour control system through **air-solution spraying methods**.

These measures will remain applicable for the proposed expansion, as the MSW storage pit will remain the same.

D. Proposed Measures- Leachate Treatment Plant:

Leachate plant emissions will be channelized to the biogas plant, where the CH_4 will be recovered from the biogas. Carbon dioxide (CO_2) and hydrogen sulphide (H_2S) will be removed from the biogas using amine-based scrubbing and absorption methods, these gases directed to the Flue Gas Cleaning System for the treatment and thereafter discharge through chimney.

28.2.17: Written submissions: Proponent made the following written submission during the meeting:

S. No.	Query	Reply
1	PP shall submit the Revised PPT after removing ranges and +-%.	Revised PPT after removal of ranges & % figures from capacity has been submitted.
2	PP shall submit the existing and proposed additional air pollution control measures and odour control measures.	The details of existing and proposed additional air pollution control measures as mentioned above has been submitted.
3	PP shall submit a Comparison of 2018 EIA baseline and current baseline data for both air and water.	A detailed Comparison of 2018 EIA baseline (December 2017-February 2018) and current baseline data (March-May 2024) for both air and water has been submitted.
4	PP shall submit Compliance to Earlier	Earlier Public Hearing was conducted on 21.05.2018 by Delhi Pollution Control Committee (DPCC) under the supervision of

<table>
<tr><th>S. No.</th><th>Query</th><th>Reply</th></tr>
<tr><td></td><td>Public Hearing held on 21.05.2018.</td><td>Additional District Magistrate at project site near existing Tehkhand Landfill site/ Bus depot, Maa Anandmai Marg, Okhla, New Delhi.
Please find below the brief of Public hearing minutes:
▪ Attended by 230 persons
▪ 08 persons expressed their views/queries/suggestions/questions during the public hearing while 57 written suggestion/views slips were received. However, all the queries were responded by the Project proponent
▪ Overall, the public was happy and welcomed the project for the management of solid waste in the area.
▪ Further, it was suggested for adequate control measures to minimize the pollution. Summary of the commitment are given below:
<table>
<tr><th>S. No.</th><th>Activity</th><th>Amount Spent</th><th>Remarks</th></tr>
<tr><td>1</td><td>Noise Pollution</td><td>Approx. 0. 35 lakhs annually</td><td>Regular monitoring is being done by approved NABL / MoEFCC laboratory</td></tr>
<tr><td>2</td><td>Air Pollution</td><td>Rs. 2514 lakhs (Capital Cost)
Rs. 424.04 lakhs (recurring for the FY 2023-24 & FY 2024-25)</td><td>2 nos. Flue Gas Cleaning System (Bag Filter), Anti Smog Gun, Water Sprinklers etc.</td></tr>
<tr><td>3</td><td>Employment for rag pickers</td><td>Rs. 18.95 lakhs (for the FY 2023-24 & FY 2024-25)</td><td>Employment to the rag pickers (7 No’s) have been provided in the TWEPL.</td></tr>
</table>
The Public Hearing minutes has been submitted.</td></tr>
<tr><td>5</td><td>PP shall submit undertaking of Expansion provision mentioned in earlier EIA.</td><td>Undertaking of expansion provisions mentioned in earlier EIA has been submitted.</td></tr>
<tr><td>6</td><td>PP shall submit an undertaking that there is no addition in the existing MSW storage pit for the proposed expansion.</td><td>An undertaking is attached herewith confirming that there is no addition to the existing MSW storage area for proposed expansion. The existing area and volume of the MSW storage pit has been submitted.</td></tr>
<tr><td>7</td><td>PP to suggest Nearby park to be adopted in consultation with MCD for green area development.</td><td>Plantation will be undertaken in nearby areas as per the parks/locations allocated by the Municipal Corporation of Delhi (MCD), with a target of planting 5,000 indigenous saplings over a period of three years, in coordination with MCD. Additionally, within the project site, Miyawaki plantation will be implemented</td></tr>
</table>

S. No.	Query	Reply
		in designated areas as per space availability. The undertaking for the same has been submitted.
8	PP shall Improve FGCS and also a modelling study shall be conducted for various stack height and receptors nearby.	The proposed Flue Gas Cleaning System (FGCS) will be designed with 130% capacity, providing an additional margin for efficient emission control. The best available fabric filter materials will be used for the filter bags. A comprehensive modelling study will be conducted for various stack heights for nearby receptors, and the optimised height will be selected to achieve better pollutant dispersal for the proposed expansion.
9	PP shall utilize the third party monitoring reports in addition to the existing baseline data conducted between March to May 2024 for preparation of EIA report.	The third party monitoring reports will be used apart from the already conducted baseline study from March to May 2024.

Observations and deliberation of the EAC

28.2.18: The Committee observed and noted the following:

i. Instant proposal is for expansion of existing 25 MW Waste to Energy (WTE) Plant up to 45 MW by M/s Tehkhand Waste to Electricity Project Limited located at adjacent DTC Tehkhand, Depot, Maa Anandmai Marg, District Southeast, New Delhi.
ii. The existing project was accorded EC on 26/07/2018 and the same has been implemented.
iii. Proposed expansion is envisaged within the existing land of 6.0703 Ha and no additional land is required for the proposed expansion.
iv. The EAC also took into consideration the drone survey of the project site and KML file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH portal.
v. There is a SLF located adjacent to WTE site which is owned by Municipal Corporation of Delhi for which EC was accorded by the Ministry on 29/10/2018. This SLF is an interdependent projects or activities for the proposed WTE expansion as MSW from SLF will be sent to WTE for treatment and waste (ash & inert) from WTE will be sent to SLF for disposal.
vi. There is no involvement of forest land in the proposed project.
vii. There are three Archaeological Sites within the radius of 2 km from the project site namely Nai-ka-kot in Tughlaqabad; Walls, gate and bastions of Adilabad (Mohammadabad) and causeway leading there to from Tughlakabad and Tomb of Ghiyasuddin Tughlakabad.
viii. Asola Wildlife Sanctuary ESZ is located at 0.72 km SW & Asola Wildlife Sanctuary is located at 1.65 km SW from the project site. Okhla Bird Sanctuary ESZ is located

at 4.76 Km NE and Okhla Bird Sanctuary is located at 4.83 km NE from the project site.

ix. The project site is located at distance of 0.61 km from the Okhla Industrial Area which is a Critically Polluted Area (CPA) having CEPI score of 92.65. Proponent is required to submit action plan for additional environmental safeguards as per MoEF&CC O.M. dated 31/10/2019.

x. MSW requirement for the proposed expansion is 1000 TPD and the same would be supplied MCD through trucks and dumpers.

xi. The existing power requirement of 3.5 MW is obtained from Inhouse (WtE Plant). .The power requirement for the proposed project is estimated as 2.8 MW, which will be obtained from the Inhouse (WtE Plant).

xii. The water requirement for the proposed project is estimated as 632 m^3/day, out of which 7 m^3/day, of fresh water requirement will be obtained from the DJB pipeline supply and the remaining requirement of 625 m^3 /day will be met from the treated water from Okhla STP and inhouse treated water. The water will be transported to the plant site through pipelines.

xiii. The cost of the project expansion project is Rs. 435 crores. Environmental Management Plan (EMP) for the existing project incurred a capital cost of Rs. 42.72 crores. The annual recurring cost towards the environmental protection measures is Rs. 5.65 Crores. The employment generation from the proposed project / expansion is 45 nos during the operation phase and 262 workers during the construction phase.

xiv. EAC deliberated on the request of project proponent regarding exemption sought from conduct of public consultation for the proposed expansion project on the following grounds:

- Proposed expansion of WTE was already envisaged under the proposal submitted for existing EC dated 26/07/2018.
- Proposed expansion of WTE from 25 to 45 MW will be confined to the existing land of 6.0703 Ha only.
- 6.0703 Ha is already undergone public hearing process as per the provisions contained under EIA Notification, 2006 at the time of grant of EC during 26/07/2018.
- No reduction in green belt area of 2.01 Ha due to the proposed expansion of WTE.
- Proposed expansion will facilitate disposal of additional 1000 tons per day of Municipal Solid Waste.
- State Govt. of Delhi has initiated the neutralization of the waste dump site and the existing project is playing a key role in reducing the waste dumped into landfills by using Municipal Solid waste to generate power.
- Central Pollution Control Board (CPCB) has introduced a new "blue category" to classify industries providing Essential Environmental Services (EES) like waste management and pollution control. This category recognizes activities such as waste-to-energy plants, sewage treatment plants, and landfill maintenance, which are crucial for managing pollution from both domestic and industrial sources.
- Increase in pollution load due to the proposed WTE expansion will be minimized by adopting additional environmental safeguards.

In this regard, the member secretary apprised the EC as per the provisions contained under para 7(ii) a of EIA Notification 2006, all applications seeking prior environmental clearance for expansion with increase in the production capacity beyond the capacity for which prior environmental clearance has been granted under this notification shall be made in Form I and they shall be considered by the concerned Expert Appraisal Committee or State Level Expert Appraisal Committee within sixty days, who will decide on the due diligence necessary including preparation of Environment Impact Assessment and public consultations and the application shall be appraised accordingly for grant of environmental clearance.

After deliberating on the above, EAC opined that proposed expansion of WTE project may be exempted from the conduct of fresh public hearing in terms of the provisions contained under para 7(ii)a of EIA, 2006. However, public consultation by obtaining responses in writing from concerned persons having a plausible stake in the environmental aspects of the project or activity shall be carried out as per the procedure prescribed under EIA, 2006.

xv. EAC opined that there should be a site visit by the Sub-committee of EAC to see the various environmental issues pertaining to the instant project before consideration of EC proposal.

xvi. The EAC also deliberated on the written submissions of the project proponent and found it satisfactory.

Recommendations of the Committee:

28.2.19: The EAC after detailed deliberations on the information submitted and as presented during the meeting ***recommended*** the proposal for grant of ToR for conducting an EIA study for the above project **subject to uploading of written submission** on PARIVESH Portal under the provisions of the EIA Notification, 2006, as amended along with the following specific ToR in addition to the generic ToRs.

[A] Environmental Management and Biodiversity Conservation

i. Project proponent shall submit an action plan to comply with the additional environmental safeguards as per MoEF&CC O.M. dated 31/10/2019 shall be submitted as the project site is located at a distance of 0.61 km from the Okhla Industrial Area which is a Critically Polluted Area (CPA).
ii. PP shall obtain No Objection Certificate from Archeological Survey of India for blasting for its impact on Nai-ka-kot in Tughlaqabad; Walls, gate and bastions of Adilabad (Mohammadabad) and Tomb of Ghiyasuddin Tughlakabad.
iii. Project proponent shall submit the authenticated map of Chief Wildlife Warden indicating the distance between the boundary of the project site and Asola Wildlife Sanctuary ESZ , located at 0.72 km SW Asola Wildlife Sanctuary, located at 1.65 km SW, Okhla Bird Sanctuary ESZ located at a distance of 4.76 km NE and Okhla Bird Sanctuary located at 4.83 km NE.
iv. Cumulative Environmental Impact Assessment study of all the existing and proposed project shall be conducted.
v. Details of characterization of Municipal solid waste, its segregation process and disposal of waste management plan shall be submitted along with EIA.
vi. A plan shall be submitted to minimize the least use of hard plastic getting burn

into the incinerators.

vii. Proximate and ultimate analysis, Calorific value of municipal waste proposed to be brought from nearby MSW shall be carried out for design purpose of boilers. Mass balance of waste in the process shall be submitted.

viii. Toxicity Characteristic Leachate Procedure (TCLP) test shall be conducted for Characterization of leachate, any potential of leaching heavy metals into the surrounding areas as well as into the groundwater. TCLP analysis of heavy metals, texture, bulk density, Cation Exchange Capacity of Heavy metals in the flyash and bottom ash shall be conducted for existing plant.

ix. The remedial measures for arresting dust generation on roads and atmosphere, Air pollution control measures including NOx control measure, treatment of leachate and stabilizing the slopes shall be taken up. Implementation plan along with timelines and financial allocations for Scientific and engineered closure of existing landfill shall be submitted.

x. Detailed Geo-hydrological study shall be conducted w.r.t. hydraulic gradient, porosity and infiltration around 2 km of the project site.

xi. Aquifer characteristics shall be clearly mapped by conducting in-situ studies.

xii. Treatment and disposal of leachate shall be submitted. No water from the plant is allowed to enter into canal/ nallah/ stream.

xiii. Details regarding Flue gas treatment, ash generation and its disposal/utilization method shall be submitted.

xiv. Monitoring of dioxins and furans and other heavy metals shall also be carried out in the stack emissions as per the Municipal Solid Waste Rules, 2016 for one season for the existing plant.

xv. Impact of existing integrated facility on natural environment be studied and a comparative statement clearly mentioning the impacts on existing water bodies, and other ecologically sensitive areas within 10 km radius of project be submitted.

xvi. A comparative chart shall be prepared with changes observed from previous baseline study (existing nearby Waste to Energy Plant) and present baseline study.

xvii. An epidemiological study shall be carried out within 5 km range of the existing integrated facility.

xviii. Detailed action plan shall be prepared for maintenance of air pollution control equipment.

xix. Pond and ground water quality (10 locations within 2 km radius of the plant boundary) shall be studied and report be submitted along with EIA/EMP. Action plan for Ground water monitoring stations on all hotspots like schools/hospitals within 2 km radius of the plant boundary be submitted.

xx. Baseline Study for Heavy metals in Ground water, Surface water and soil to be carried out and incorporated in EIA/EMP report.

xxi. Details pertaining to water source, treatment and discharge should be provided.

xxii. Zero Liquid Discharge plan shall be submitted.

xxiii. Action plan for development of green belt (40% of total project cover area) along the periphery plantation with 90% survival rate and detailed plan for thick plantation in the surrounding Nallah/stream shall be submitted.

xxiv. PP shall submit action plan for using treated Sewage/Domestic wastewater for its operations.

xxv. Project Proponent to conduct Environmental Cost Benefit Analysis for the project in EIA/EMP Report.

xxvi. An action plan shall be prepared for Water shed development within 10 km radius of the plant boundary in consultation with reputed government institution.

xxvii. A detailed plan need to be submitted for undertaking extensive green plantation within 10 km radius of the plant focusing on water reservoir, school, hospital and other institutional area and same need to be incorporated in EIA/EMP report.

xxviii. A detailed action plan of Plantation shall be prepared for nearby areas as per the parks/locations allocated by the Municipal Corporation of Delhi (MCD), with a target of planting 5,000 indigenous saplings over a period of three years, in coordination with MCD. Additionally, within the project site, Miyawaki plantation shall be implemented in designated areas as per space availability.

xxix. Recommendations of the Commission for Air Quality Management in National Capital Region and Adjoining Areas shall be submitted.

xxx. Comparative statement regarding baseline data collected during Dec 2017 to Feb 2018 & March to May 2024along with the reasons behind the considerable changes in the baseline data shall be furnished.

xxxi. Action plan for indoor saplings of plants (about 10000) shall be distributed/made available to residents in nearby residential areas. Further, vertical garden/creepers can be erected on the compound wall of premises. The fog cannon can be used to mitigate air pollution within premises of project.

xxxii. PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign, which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than Green belt development. An action plan in this regard shall be submitted.

[B] Disaster Management

i. A Disaster Management Plan shall be prepared and incorporated in the EIA/EMP report.

[C] Socio-economic Study

i. Public Health Action Plan including the provisions for drinking water supply for the local population shall be in the EIA/EMP Report. The status of the existing medical facilities in the project area shall be discussed. Possibilities of strengthening of existing medical facilities, construction of new medical infrastructure etc. will be explored after assessing the needs of the labour force and local populace.

ii. Proposed expansion of WTE project from 25 to 45 MW is exempted from the conduct of fresh public hearing in terms of the provisions contained under para 7(ii)a of EIA, 2006. However, public consultation by obtaining responses in writing from concerned persons having a plausible stake in the environmental aspects of the project or activity shall be carried out as per the procedure prescribed under EIA, 2006 as amended. As per the Ministry's OM dated 30.09.2020, to address the concern raised during the Public consultation, the Project Proponent is required to submit the detailed activities proposed with year-wise budgetary provision (Capital and recurring) for 5 years. Activities proposed shall be part of EMP. The recommendation Socio-economic study may also be considered while planning the activities & budget.

iii. A need based Social Impact Assessment Study shall also be carried out and an action plan on its recommendations may also be submitted with budgetary provisions.

iv. Demographic details and land use change details in 10 km area shall be submitted.

[D] Miscellaneous

i. Plot the wind rose diagram using the typical meteorological year (TMY) data for the period considered for the study. The monitoring units shall be deployed in the field based on the coverage area ratio and direction of the wind. A mathematical model shall be developed for the local site rather than using the standard model available in software for both air & water quality modeling.

ii. PP shall align its activities to one/few of the Sustainable Development Goals (SDG) and start working on the mission of net zero by 2050. PPs shall update the same to the EAC.

iii. PP shall submit the EIA/EMP report after the plagiarism check using authenticated plagiarism software.

iv. Detailed description of all the court cases along with its current status shall be submitted.

v. PP should provide in the EIA Report details of all the statutory clearances, permissions, no objection certificates, consents etc. obtained for this project under various Acts, Rules and regulations shall be submitted. Further, all the permissions/MoUs obtained for this project shall be revalidated and submitted along with the EIA/EMP report.

vi. The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs, which will analyze the samples.

vii. PP should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations. In addition to this PP should mention the number and designation of persons to be engaged for the implementation of environmental management plan (EMP). The capital and recurring expenditure to be incurred needs to be submitted.

viii. PP should submit the year-wise, activity wise and time-bound budget earmarked for EMP, occupational health surveillance, and activities proposed to address the issues raised during Public Consultation. The capital and recurring expenditure to be incurred needs to be submitted.

ix. The PP should ensure that only NABET-accredited consultants shall be engaged for the preparation of EIA/EMP Reports. PP shall ensure that the accreditation of the consultant is valid during the collection of baseline data, preparation of EIA/EMP report and the appraisal process. The PP and consultant should submit an undertaking the information and data provided in the EIA Report and submitted to the Ministry are factually correct and the PP and consultant are fully accountable for the same.

x. PP should provide in the EIA Report details of the statutory clearances, permissions, no objection certificates, consents etc. required for this project under various Acts, Rules and regulations and their status or estimated timeline after the grant of EC.

xi. All the certificates viz. involvement of Forestland, distance from the protected area, and list of flora & fauna should be duly authenticated by the Forest Department. The Certificate should bear the name, designation, official seal of the person signing the certificate and dispatch number.

xii. The findings of the subcommittee report shall be incorporated in the final EIA/EMP report.

Agenda No. 28.3

28.3 Expansion of Lara Super Thermal Power Project from 3200 MW [Stage-I (2x800 MW) & Stage-II (2x800 MW)] to 4800 MW by adding two units of 800 MW under Lara Super Thermal Power Project, Stage-III (2x800 MW) by **M/s NTPC Limited** located **at Villages Armuda, Chhapora, Bodajhariya, Mahloi, Riyapalli, Kandagarh. Devalpura, Ghutkupali, Thengapali, Lara in Tehsil Pussore, District Raigarh and Village Saradih in Tehsil Dabhara, District Sakti, Chhattisgarh – Prescribing of Terms of Reference – regarding.**

[Proposal No. IA/CG/THE/543085/2025, F.No. J-13012/11/2018-IA. I (T)]

28.3.1: M/s. NTPC Limited has made an application online vide proposal no IA/CG/THE/543085/2025 dated 28.06.2025 along with the application in prescribed format (CAF, Form-1 Part A & B), copy of pre-feasibility report and proposed ToRs for undertaking detailed EIA study as per the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at item no. 1(d) – Thermal Power Plants under Category 'A' of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Name of the EIA consultant: MITCON Consultancy and Engineering Services Ltd., Shivajinagar, Pune – 411005 [S. No. 142 List of ACOs with their Certificate/Extension Letter no NABET/EIA/24-27/RA 0343 Valid up to 05.02.2027].

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

28.3.2: The existing "2x800 MW Coal Based Lara Super Thermal Power Project" was accorded environmental clearance vide file.no J 13012/79/2007-IA. II(T) dated 13.12.2012 from MOEF&CC. Consent to Operate for the existing unit was accorded by Chhattisgarh Environment Conservation Board, Raipur, (C.G.) vide No 1109/TS/CECB/2025 dated 29.04.2025. The validity of CTO is up to 30.04.2026. "2x800 MW (Expansion, Stage-II) Coal Based Lara Super Thermal Power Project" was accorded environmental clearance vide EC ID No EC23A0601CG5636268E dated 17.07.2023 from MOEF&CC and the same is under construction. Consent to Establish for the existing units of Stage-II was accorded by Chhattisgarh Environment Conservation Board, Raipur, (C.G.) vide No 3168/TS/CECB/2024 dated 12.07.2024. The validity of CTE is up to 11.07.2029.

28.3.3: Implementation status of the existing EC dated 13/12/2012 & 17/07/2023

S. No.	Configuration	Capacity (MW)	As per EC dated	Implementation Status as on 28.07.2025	Production as per CTO/CTE
1.	Stage-I: 2x800 MW	(1600 MW)	13.12.2012	Under Operation	1600 MW
2.	Stage-II: 2x800 MW	(1600 MW)	17.07.2023	Under Construction	1600 MW

28.3.4: Environmental site settings

S. No	Particulars	Details	Remarks
1.	Total land	1227.88 ha [Private: 1031.42 ha; Govt.: 33.35 ha; and Forest:163.11 ha;]	Land use: Industrial, Agriculture & Forest

<table>
<tr><th>S. No</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>2.</td><td>Land use break up</td><td>
<table>
<tr><th>S.N.</th><th>Description</th><th>Stage-I (Ha)</th><th>Stage-II (Ha)</th><th>Stage-III (Ha)</th><th>Total (Ha)</th></tr>
<tr><td>1</td><td>Main Plant</td><td>157.89</td><td>107.69</td><td>71.66</td><td>337.24</td></tr>
<tr><td>2</td><td>Ash Dyke</td><td>168.02</td><td>0.00</td><td>125.00</td><td>293.02</td></tr>
<tr><td></td><td>Sub Total (Plant & Ash Dyke)</td><td>325.91</td><td>107.69</td><td>196.66</td><td>630.26</td></tr>
<tr><td>3</td><td>Green Belt</td><td>90.88</td><td>12.71</td><td>103.44</td><td>207.03</td></tr>
<tr><td></td><td>Green Belt (%) of Main Plant & Ash Dyke Area</td><td>27.88</td><td>11.80</td><td>52.60</td><td>33.00</td></tr>
<tr><td>4</td><td>Reservoir</td><td>54.66</td><td>23.89</td><td>0.00</td><td>78.55</td></tr>
<tr><td>5</td><td>Township</td><td>61.13</td><td>0.00</td><td>0.00</td><td>61.13</td></tr>
<tr><td>6</td><td></td><td>49.8</td><td>16.32</td><td>4.34</td><td>70.46</td></tr>
<tr><td>7</td><td>Ash Corridors</td><td>21.39</td><td>0.00</td><td>0.00</td><td>21.39</td></tr>
<tr><td>8</td><td>Rly Siding</td><td>31.17</td><td>6.62</td><td>2.23</td><td>40.02</td></tr>
<tr><td>9</td><td>Make-up water PH Area</td><td>2.85</td><td>0.00</td><td>0.00</td><td>2.85</td></tr>
<tr><td>10</td><td>Ash Brick Plant</td><td>0.00</td><td>0.00</td><td>2.83</td><td>2.83</td></tr>
<tr><td></td><td>Total Project land (except green Belt in Ha)</td><td>546.91</td><td>154.52</td><td>206.06</td><td>907.49</td></tr>
<tr><td>11</td><td>Green belt outside plant(NTPC acquired land)</td><td>0.00</td><td>87.04</td><td>26.32</td><td>113.36</td></tr>
<tr><td></td><td>Total (Ha)</td><td>637.79</td><td>254.27</td><td>335.82</td><td>1227.88</td></tr>
</table>
Note: The green belt on 207.03 Ha will be developed inside the plant boundary i.e: 33 % of the Main Plant and Ash Dyke area. Green belt of 320.39 Ha inside and outside of plant on NTPC acquired land accounting to 35.3 % of the total project land.
</td><td></td></tr>
<tr><td>3.</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014</td><td>Total 1039.09 Ha of land was acquired. [Pvt: 815.26 ha (Perpetual Leasehold Right of NTPC-Lara :811.381 Ha and full Ownership Right of NTPC - Lara: 03.926 ha), Govt: 72.26 ha (Government Land 72.26 Transferred in favour of NTPC- Lara) & Forest:151.76 ha (Diversion of Forest Land for Lara STPP) and 4.02 Ha land is in under land acquisition process.
In addition to above 225.66 Ha of land (Pvt:212.32 ha, Govt:1.99 ha & Forest:11.35 ha) shall be acquired for Ash Dyke, Ash Pipe & Road Corridor and Green belt corridor.
(Govt Land of 40.89 ha was handed over to respective village as CPR Land).</td><td></td></tr>
<tr><td>4.</td><td>Existence of habitation & involvement of R&R, if any.</td><td>Project site: No habitation
Study Area:
<table>
<tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Lohakhan</td><td>0.25 Km</td><td>W</td></tr>
<tr><td>Chhapora</td><td>0.3 Km</td><td>N</td></tr>
<tr><td>Mehloi</td><td>0.5 Km</td><td>NW</td></tr>
<tr><td>Dewalsura</td><td>0.5 Km</td><td>W</td></tr>
<tr><td>Charpali</td><td>1.5 Km</td><td>E</td></tr>
</table>
</td><td>No R&R issue</td></tr>
</table>

<table>
<tr><th>S. No</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>Rengalpali</td><td>1.30 Km</td><td>NE</td></tr>
<tr><td>Darripali</td><td>1.68 Km</td><td>W</td></tr>
<tr><td>Ghutakupali</td><td>1.83 Km</td><td>NW</td></tr>
<tr><td>Kodpali</td><td>1.88 Km</td><td>SW</td></tr>
<tr><td>Thengapali</td><td>1.91 Km</td><td>N</td></tr>
<tr><td>Pussore</td><td>5.15 m</td><td>W</td></tr>
</table>
Protective measures adopted are as follows:
• Dedicated plant approach roads avoiding villages.
• Covered trucks and speed control within 25 km/h Warning signage near village road junctions.
• Periodic health check-up camps in villages.
• Distribution of masks during peak construction Supply of treated drinking water
• Livelihood enhancement programs (skill training, vendor inclusion)
• Preference to local employment
• Community development under CSR
• Village-level grievance cell
• Monthly community interaction meetings
• Toll-free helpline and grievance log
• Acoustic enclosures for turbines and DG sets.
• Construction limited to daytime hours near habitations.
• Plantation buffers along plant boundary
• Zero Liquid Discharge (ZLD) policy
• Lined drains and leak-proof ash slurry pipelines
</td><td></td></tr>
<tr><td>5</td><td>Existence of school and hospitals if any.</td><td>
A. School
Project site: Gurukul International
Study Area:
<table>
<tr><th>School</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Deolsura</td><td>0.5 Km</td><td>W</td></tr>
<tr><td>Riyapali</td><td>0.5 Km</td><td>N</td></tr>
<tr><td>Kasaipali</td><td>0.6 Km</td><td>N</td></tr>
<tr><td>Chhapora</td><td>0.5 Km</td><td>N</td></tr>
<tr><td>Mehloi</td><td>0.7 Km</td><td>NW</td></tr>
<tr><td>Bodajhariya</td><td>0.38 Km</td><td>E</td></tr>
<tr><td>Netnagar</td><td>2.1 Km</td><td>NE</td></tr>
</table>
Protective measures adopted are as follows:
• Air and Noise Control: Dust suppression, greenbelt development, and acoustic barriers will be implemented; high-noise activities will be limited to non-school hours.
• Safe Access: Signage, speed breakers, and crossing guards will be provided; heavy vehicle movement near schools will be restricted during school timings.
• Health & Awareness: Regular health camps, distribution of masks, and environmental awareness programs will be conducted for students.
• CSR & Monitoring: Support for school infrastructure and scholarships will be provided under CSR; air and noise
</td><td></td></tr>
</table>

<table>
<tr><th>S. No</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>monitoring near schools will be included in the EMP.
B. Hospital
Project site: NTPC Stabilization centre, Lara
Study Area:
<table>
<tr><th>PHC/ Sub Health Center (Hospital)</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Deolsura-PHC</td><td>0.5 Km</td><td>W</td></tr>
<tr><td>Nawapara-SHC</td><td>1.35 Km</td><td>N</td></tr>
<tr><td>Kathani-SHC</td><td>1.96 Km</td><td>W</td></tr>
<tr><td>Rengalpali-SHC</td><td>1.40 Km</td><td>E</td></tr>
<tr><td>Netnagar-SHC</td><td>1.7 Km</td><td>NE</td></tr>
<tr><td>Muralipali-SHC</td><td>2.45 Km</td><td>S</td></tr>
<tr><td>Badehaldi-SHC</td><td>3.96 Km</td><td>N</td></tr>
</table>
Protective measures adopted are as follows:
• Dust Suppression: Regular water sprinkling and fogging near access roads and work zones close to health centres.
• Greenbelt Buffer: Plantation of native species between the plant and nearest health centre to reduce air and noise impact.
• Monitoring: Third parity ambient air and noise quality within 0.5 km; data shared with local health authorities.
• Noise & Vibration Control: High-noise and vibration activities to be scheduled outside critical healthcare hours.
• CSR Support: Provision of medical equipment, emergency kits, health camps, and training to nearby health centres.
• Emergency Preparedness: Health centres will be integrated into the project's disaster response and coordination plans.</td><td></td></tr>
<tr><td>6.</td><td>Latitude and Longitude of all corners of the project site</td><td>A. Plant site
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>21°44'54.27"N</td><td>83°27'38.88"E</td></tr>
<tr><td>B</td><td>21°45'49.88"N</td><td>83°27'42.64"E</td></tr>
<tr><td>C</td><td>21°46'19.41"N</td><td>83°27'42.09"E</td></tr>
<tr><td>D</td><td>21°46'13.99"N</td><td>83°27'18.53"E</td></tr>
<tr><td>E</td><td>21°45'43.61"N</td><td>83°27'12.29"E</td></tr>
<tr><td>F</td><td>21°45'48.05"N</td><td>83°26'14.69"E</td></tr>
<tr><td>G</td><td>21°45'1.07"N</td><td>83°26'8.51"E</td></tr>
<tr><td>H</td><td>21°44'56.15"N</td><td>83°26'35.99"E</td></tr>
<tr><td>I</td><td>21°44'57.73"N</td><td>83°27'3.94"E</td></tr>
</table>
B. Existing Township
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>1</td><td>21°45'48.83"N</td><td>83°26'13.46"E</td></tr>
<tr><td>2</td><td>21°45'52.00"N</td><td>83°25'36.04"E</td></tr>
<tr><td>3</td><td>21°45'30.34"N</td><td>83°25'34.04"E</td></tr>
<tr><td>4</td><td>21°45'27.42"N</td><td>83°26'11.50"E</td></tr>
</table>
C. Existing Ash Pond
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
</table></td><td></td></tr>
</table>

<table>
<tr><th>S. No</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>1</td><td>21°44'18.70"N</td><td>83°28'11.66"E</td></tr>
<tr><td>2</td><td>21°43'49.80"N</td><td>83°28'40.03"E</td></tr>
<tr><td>3</td><td>21°43'44.81"N</td><td>83°28'22.30"E</td></tr>
<tr><td>4</td><td>21°43'21.20"N</td><td>83°28'7.52"E</td></tr>
<tr><td>5</td><td>21°43'8.09" N</td><td>83°27'49.20"E</td></tr>
<tr><td>6</td><td>21°43'18.64"N</td><td>83°27'41.19"E</td></tr>
<tr><td>7</td><td>21°44'0.21"N</td><td>83°27'43.05"E</td></tr>
<tr><td>8</td><td>21°44'6.12"N</td><td>83°27'55.90"E</td></tr>
<tr><td>9</td><td>21°43'58.06"N</td><td>83°28'6.16"E</td></tr>
<tr><td>10</td><td>21°44'2.68"N</td><td>83°28'7.74"E</td></tr>
</table>
D. New Ash Pond Proposed
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>21°44'54.73"N</td><td>83°26'55.54"E</td></tr>
<tr><td>B</td><td>21°44'55.69"N</td><td>83°26'57.80"E</td></tr>
<tr><td>C</td><td>21°44'50.75"N</td><td>83°28'07.29"E</td></tr>
<tr><td>D</td><td>21°44'21.48"N</td><td>83°28'04.06"E</td></tr>
<tr><td>E</td><td>21°44'27.51"N</td><td>83°27'08.08"E</td></tr>
</table>
</td><td></td></tr>
<tr><td>7.</td><td>Elevation of the project site</td><td>Main Plant: 219 m-235 m,
Township: 221m-234 m,
Existing Ash Dyke: 219 -244 m,
New Ash Dyke: 219 -233 m.</td><td></td></tr>
<tr><td>8.</td><td>Involvement of Forest land if any.</td><td>Total Forest Land Involved: 163.11 ha
• Lara STPP Stage-I: 151.762 ha (Forest Clearances have already been accorded by MoEF&CC vide Letter no. F.NO.8-21/2012-FC dated 12.05.2014).
• Lara STPP Stage-III: 11.35 Ha of (Chote Jhad ke Jungle) in Stage-III (Proposal for Forest Clearance was already submitted vide Proposal No FP/CG/IND/542991/2025 date 27.06.2025 which is under process).</td><td></td></tr>
<tr><td>9.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td>Project site: No Water Body

Study area:
<table>
<tr><th>Water body</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Nala Near Chhapora Village</td><td>0.05 Km</td><td>N</td></tr>
<tr><td>Kelo River</td><td>0.7 Km</td><td>E</td></tr>
<tr><td>Mahandi River</td><td>2.2 Km</td><td>S</td></tr>
<tr><td>Basanpali Pond</td><td>1.50 Km</td><td>WS</td></tr>
<tr><td>Kevra Pond</td><td>0.77 Km</td><td>W</td></tr>
<tr><td>Chhapora Lake</td><td>0.67 Km</td><td>W</td></tr>
<tr><td>Hirakud reservoir</td><td>12.0 Km</td><td>East</td></tr>
</table>
Plant site (219-235m elevation) is present at higher elevation than the HFL (196.33 m MSL) of Kelo river.</td><td>HFL at Kasai Nala is 196.33 m(MSL). Plant Distance from Kasai Nala is 2.25 Km. PWD Letter from PWD Bridge Division, Raigarh - 08.05.2025 in this regard is attached.</td></tr>
<tr><td>10.</td><td>Archaeological sites monuments/ historical temples etc.</td><td>No Archaeological sites monuments</td><td></td></tr>
<tr><td>11.</td><td>Existence of ESZ/ ESA/</td><td>No National Park / Wild Life Sanctuary / Eco-Sensitive Zone / Biosphere reserve within 10 km radius of the project site</td><td></td></tr>
</table>

S. No	Particulars	Details	Remarks
	national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area.	boundary. List of Reserved and protected forests: • Gajmar R.F (4.0 km, NNE) • Jharghan R.F (5.5 km, NE) • Holsari Dungri R.F (9.3 km, ESE)	
12.	Facility envisaged in CRZ area (Only for coastal power plant)	Not Applicable	CRZ map indicating. HTL/LTL demarcated by the authorized agency in 1:4000 scale
13.	Involvement of Critically Polluted Area/Severely Polluted area as per 2018 CEPI score.	No Involvement of CPA/SPA No Proximity to CPA/SPA	Proposed additional environmental safeguards as per MoEF&CC OM dated 31/10/2019

28.3.5: The unit configuration and capacity of existing and proposed project is given as below:

S. No.	Existing power plant configuration and capacity	Proposed power plant configuration and capacity	Total	Technology adopted
1.	Stage-I: 2x800 MW (1600 MW)	Stage-III: 2x800 MW (1600 MW)	4800 MW	Ultra Super Critical
2.	Stage-II: 2x800 MW (1600 MW)			

28.3.6: The details of the fuel (Coal) requirement for the proposed project/ expansion cum proposed project along with its source and mode of transportation is given as below:

Details	Fuel requirement (MTPA)	Source	Distance from site (Kms)	Mode of Transportation	Coal characteristics (Worst case scenario)	Coal Linkage documents
Existing Lara STPP Stage-I	8.0 MTPA with 90 % PLF	NTPC Talaipali Coal Block Mining Project (TLCMP)	60	MGR	Ash: 32-43(%) Sulphur: 0.5 (%) Moisture:15 (%) GCV:3000-4000 Kcal/Kg	Allocation of Talaipali Coal Block to NTPC for meeting coal requirement of Lara STPP. MOC letter dated 25.01.2006
Existing Lara STPP Stage-II	6.6 MTPA with 85% PLF		60	MGR	Ash: 32-43(%) Sulphur: 0.5 (%) Moisture:15 (%) GCV:3000-4000 Kcal/Kg	
Proposed Lara STPP Stage-III:	6.5 MTPA with 85 % PLF	4.5 MTPA from NTPC Talaipalli Coal Block.	60	MGR/Indian Railway	Ash: 32-43(%) Sulphur: 0.5 (%) Moisture:15 (%) GCV:3000-4000	Allocation of Talaipali Coal Block to NTPC for meeting

Details	Fuel requirement (MTPA)	Source	Distance from site (Kms)	Mode of Transportation	Coal characteristics (Worst case scenario)	Coal Linkage documents
		Coal linkage for balance requirement (2MTPA) need to be obtained/to be tie up.			Kcal/Kg	coal requirement of Lara STPP. MOC letter dated 25.01.2006

The details of the fuel LDO requirement for the proposed project/ expansion cum proposed project along with its source and mode of transportation is given as below:

Details	Fuel requirement (in KL PER ANNUM)	Source	Distance from site (Kms)	Mode of Transportation	LDO Characteristics	Linkage document
Existing TPP Stage-I	5956 KL (assuming 85 % PLF with normative oil consumption 0.5 ml/kwh)	BPCL/ HPCL/ IOCL	>600	Rail	Applicable IS 15770:2008 Calorific Value-9000-10000 K.cal/Kg Sulphur -1.5 (%) Max Flash Point -85(^{0}C)	---
Existing TPP Stage-II	5956 KL (assuming 85 % PLF with normative oil consumption 0.5 ml/kwh)	BPCL/ HPCL/ IOCL	>600	Rail	Applicable IS 15770:2008 Calorific Value-9000-10000 K.cal/Kg Sulphur -1.5 (%) Max Flash Point -85(^{0}C)	
Proposed TPP Stage-III	5956 KL (assuming 85 % PLF with normative oil consumption 0.5 ml/kwh)	BPCL/ HPCL/ IOCL	>600	Rail	Applicable IS 15770:2008 Calorific Value-9000-10000 K.cal/Kg Sulphur -1.5 (%) Max Flash Point -85(^{0}C)	---

28.3.7: Water requirement: Existing Water requirement of Stage-I is 4830 m^3/hr (1,15,920 KLD) and Stage-II is 4800 m^3/hr (1,15,200 KLD). The water requirement for the proposed Lara STPP Stage-III is estimated as 1600 m^3/hr (38,400 KLD). Water Resource Department (WRD), Government of Chhattisgarh have accorded permission for water allocation of 45 MCM (5137 m^3/hr) for stage-I (2x800 MW) power project vide letter 8734 dated 02.12.2010 and vide letter 4570 dated 10.06.2013 for 68 MCM (7763 m^3/hr) for Stage-II for Lara STPP from Saradih barrage on river Mahanadi. Water Requirement of Stage-III shall be meet from existing allocation of Water for Stage-I & II. The water will be transported to the plant site through pipeline from 38 km of distance. The specific water consumption for the power plant will be maintained by 3.0 m^3/MWhr.

28.3.8: Power requirement: Existing power requirement of Stage-I & II is 230 MW which are obtained from Lara STPP. The power requirement for the proposed project Stage-III is estimated as 116 MW, which will be obtained from the Lara STPP.

28.3.9: Solid and hazardous waste Management: The details of solid and hazardous waste generation along with its mode of treatment/disposal are furnished as below:

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal	Remarks
1	Municipal Solid Waste (Biodegradable)	Residential Colony	135	Composting, & Reuse.	In house composting	
	Municipal Solid Waste (non-biodegradable)		65	Co-processing	Through Co-processor	
2	Plastic Packaging waste	Packaging of goods (Plant & offices)	5	Co-processing	Disposal through Co-processor	
3	E-waste	Plant's IT Electrical & Electronic Equipment	05	---	Disposal through authorized recyclers	
4	Used Batteries	Backup power system	02	---	Disposal through authorized recyclers	Provision in contract for buy-back
5	Biomedical Waste	Stabilisation Centre	0.02	---	Disposal in house facility	
6	Hazardous waste					
6.1	Used or spent oil	Operation & Maintenance works	100	--	Disposal through authorized recyclers	
6.2	Spent Ion exchange resin containing toxic metals	Water Treatment work	02	--	Disposal through TSDF	
6.3	Empty barrels/containers/liners contaminated with	Operation & Maintenance works	10000 Nos	--	Sale to authorized recyclers	
6.4	Waste or residue containing oil	Operation & Maintenance works	10	--	Sale to authorized recyclers	
6.5	Mineral Wool	Operation & Maintenance works	30	--	Disposal through TSDF	
6.6	Asbestos	Operation & Maintenance works	0.1	--	Disposal through TSDF	

28.3.10: Cost of project: Existing capital cost of Stage-I project was Rs. 17,869.45 Cr (As per latest approved RCE-III Cost) and Stage-II was Rs. 15,529.99 Cr (As per Investment Approval). The capital cost of the proposed Stage-III project is Rs. 20,500.00 Cr (At Current Cost level including GST.) and the capital cost for environmental protection measures is proposed as Rs. 3101.40 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 62.03 Crores. The employment generation from the proposed project / expansion is 60 (Permanent) & 4000 (Contractual) during construction and 115 (Permanent) & 1500 (Contractual) during operation.

28.3.11: Green belt development: Green belt area in existing Stage-I & Stage-II is 90.88 ha & 12.71 ha respectively, which is about 27.88 % of 325.91 ha [Main Plant (Stage-I) & Ash Dyke Area (Stage-I)] and 11.80 % of 107.69 ha [Main Plant (Stage-II). Total 3,23,000 No of sapling are already planted. Greenbelt area in proposed Lara STPP Stage-III is 103.44 ha which is about 52.60 % of 196.66 ha [Main Plant (Stage-III) & Ash Dyke Area (Stage-III)]. Thus, total of 207.03 ha area (33.00 % of 630.26 ha [Main Plant (Stage-I, II &II) & Ash Dyke Area (Stage-I&III)] will be developed as greenbelt as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 4,71,475 saplings will be planted and nurtured in 207.03 hectares in 05 years.

28.3.12: Ash management for last three years.

Year	Quantity Generated (LMT)	Quantity utilized (LMT)	% of Utilization	Cumulative Balance Quantity (LMT)	No of storage silos with capacity
2022-23	36.041	13.707	38.03	22.334	3x700=2100 MT
2023-24	31.705	32.835	103.55	21.204	
2024-25	31.254	34.377	110.0	18.081	

A. Fly ash details in last 3 years = 64.73 LMT

S. No.	**Activity (as applicable)**	**Quantity (LMT)**	**Percentage (%)**	**Remarks** (Prior approval of SPCB details to be mentioned)
1.	Fly ash-based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	0.17	0.176	
2.	Construction of roads, road and fly over embankment	56.11	56.67	
3.	Filling up of low-lying area	7.60	7.67	
4.	Filling of mine voids:	0.83	0.84	
5.	Others (please specify) Low lying area/ Abandoned mines/Stone quarry/Road construction	0.04	0.036	Stg2 -low lying ash filling
	Total	**64.73**	**65.38**	

B. Bottom ash details in last 3 years = 16.18 LMT

S. No.	Activity (as applicable)	Quantity (LMT)	Percentage (%)	Remarks (Prior approval of SPCB details to be mentioned)
1.	Fly ash-based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	0.04	0.04	
2.	Construction of roads, road and fly over embankment	14.03	14.17	
3.	Filling up of low-lying area	1.90	1.92	
4.	Filling of mine voids	0.21	0.21	
5.	Others (please specify) Low lying area/ Abandoned mines/Stone quarry/Road construction	0.01	0.01	Stg2 -low lying ash filling
	Total	**16.18**	**16.34**	

C. Legacy ash details - 0 LMT
D. Ash Pond Details:
Existing: One Ash Dyke

S. No.	Details of Ash Pond	Ash Lagoon 1	Ash Lagoon-2	Ash Lagoon-3	Overflow lagoon, Sedimentation basin, Toe drain & Peripheral Darin & Service Road	Total
1.	Status of ash pond (Active / Exhausted (yet to be reclaimed)/ Reclaimed)	Active (under Ash Utilization)	Active (In Service)	Active (Under 1st Raising Construction)	Operative	Active
2.	Area (Ha.)	67.78 (starter)	36.62 (starter)	39.66 (starter)	23.96	168.02
3.	Dyke height (m)	7.5 m (Avg. after 1st Raising)	11.75 m (Avg. after 1st Raising)	7.75 m (Avg. after 1st Raising)	--	
4.	Volume (m^3)	Starter-12,00,000 1st Raising - 12,35,000	Starter-24,00,000 1st Raising-8,85,000	Starter – 20,00,000 1st Raising - 12,15,000	--	
5.	Quantity of ash disposed (Metric Tons)				--	41.2 LMT
6.	Available volume in percentage (per cent) and quantity of ash can be further disposed (Metric Tons)	6.2 LMT	7 LMT	Under 1st Raising Construction	--	13.2 LMT
7.	Expected life of ash pond (number of years and months)				---	4.5 Months
8.	Type lining carried in ash pond: HDPE lining of LDPE lining or clay lining or No lining	HCSD Lining	Bentonite Lining	HCSD Lining	---	
9.	Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD)	HCSD	HCSD & BA Series (LCSD)	Under 1st Raising Construction	---	
10.	Ratio of ash: water in slurry mix (1:___):	1:6 (Ash slurry)	1:6 (Ash slurry)	1:6 (Ash slurry)	--	
11.	Ash water recycling system (AWRS) installed and functioning: Yes or No	No	YES	Yes	--	

S. No.	Details of Ash Pond	Ash Lagoon 1	Ash Lagoon-2	Ash Lagoon-3	Overflow lagoon, Sedimentation basin, Toe drain & Peripheral Darin & Service Road	Total
12.	Quantity of wastewater from ash pond discharged into land or water body (m^3)	Nil	Nil	Nil	--	
13.	Last date when the dyke stability study was conducted and name of the organization who conducted the study:	14.12.2021	14.12.2021	14.12.2021	--	14.12.2021 (by IIT Hyderabad)
14.	Last date when the audit was conducted and name of the organization who conducted the audit:	18.03.2025	18.03.2025	18.03.2025	--	18.03.2025 (Certification Audit by NIT Warangal)

E. Proposed ash utilization plan for expansion project:

Details	Existing generation Stage-I (MTPA)	Proposed generation Stage-II (MTPA)	Proposed generation Stage-III (MTPA)	Total (MTPA)	Utilization (MTPA)	% of utilization	Balance quantity (MTPA)	No. of storage silos with capacity
Ash (Fly & Bottom)	3200000	3200000	3200000	9600000	9600000	100 %	Nil	For Stage I: 3x500 MT (HCSD Silos) and 4x1500 MT (Main Silos) =7500 MT Envisaged. For Stage II 4x2000 MT and Stage III: 4x1500 MT

New Ash Pond Details: One New Ash Pond is proposed for Lara Stage-III and the details of new ash pond is provided as below:

S. N.	Details of Ash Pond	Fly Ash Lagoon- 1	Bottom Ash Lagoon-2	Bottom Ash Lagoon-3	Over-flow lagoon	Total
1.	Area (Ha)	39	40	40	6	125
2.	Dyke height (m)	10 m +3m (Starter dyke+1 raising)	10 m+3m+3m (Starter dyke+2 raising)	10 m+3m+3m (Starter dyke+2 raising)	7 m (Starter dyke)	
3.	Volume (m^3)	3.40 Million m3	4.10 Million m3	4.10 Million m3	0.25 Million m3	

S. N.	Details of Ash Pond	Fly Ash Lagoon- 1	Bottom Ash Lagoon-2	Bottom Ash Lagoon-3	Over-flow lagoon	Total
4.	Quantity of ash to be disposed (Metric Tons)	3.40 Million Metric Tons (considering density as 1T/Cum)	4.10 Million Metric Tons (considering density as 1T/Cum)	4.10 Million Metric Tons (considering density as 1T/Cum)	For collection and re-circulation of decanted water	
5.	Expected life of ash pond (number of years and months)	1 Years 1 Months (w.r.t. total ash generation of Stage-II)	1 Years 4 Months (w.r.t. total ash generation of Stage-II)	1 Years 4 Months (w.r.t. total ash generation of Stage-II)		
6.	Type lining carried in ash pond: HDPE lining of LDPE lining or clay lining or No lining	Suitable impervious lining as per actual site conditions meeting the imperviousness requirements as per standard "Guidelines for Design, Construction, O&M and Annual certification of Coal Ash Ponds-June 2023". HDPE lining system is envisaged in OFL and Bentonite blended lining in all ash storage lagoons.				
7.	Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD)	Fly Ash-HCSD Bottom Ash-LCSD			Not Applicable	
8.	Ratio of ash: water in slurry mix (1: ___):	Fly Ash-HCSD-1:1(50% on Dry Ash basis) Bottom Ash-LCSD-1:4(25% on Dry Ash basis)			Not Applicable	
9.	Ash water recycling system (AWRS): Yes or No	Yes			Not Applicable	
10.	Quantity of wastewater from ash pond to be discharged into land or water body (m^3)	Nil			Not Applicable	
11	Details regarding dyke stability study and name of the organization who conducted the study	As already done in all past ash dyke stability design, this will also be done by NTPC, (in-house design) in line with standard "Guidelines for Design, Construction, O&M and Annual certification of Coal Ash Ponds-June 2023". Adequate measures for safety and stability of the Ash dyke is considered from design stage. Not Applicable				

28.3.13: Baseline data collection: Baseline data collection period: 05.03.2025 to 31.05.2025

Attributes	Parameters	Sampling No. of stations	Frequency	Remarks
A. Air				
a. Meteorological parameters	Wind speed & direction Max. & Minimum Temp. (Wet & Dry bulb Temp.) Humidity Atmospheric pressure Rainfall Storm Temperature	1	Continuous	A Continuous Automatic Monitoring Meteorological station is established at near to site

Attributes	Parameters	Sampling No. of stations	Frequency	Remarks
b. AAQ parameters	SO2 NOX (NO2) PM10 PM2.5	10	Twice a week	24-hour sampling at each location using appropriate ambient air quality instruments.
B. Noise	Leq.	10	Once in Season	24 hourly sampling at each location using an integrating sound level meter
C. Water				
Surface water/Ground water quality parameters	Physical parameters: Temperature, Turbidity, Colour, Electrical Conductivity, TSS, TDS Chemical Parameters: pH, DO, Alkalinity, Hardness, BOD, COD, NO3, PO4, Cl, F, SO4, Na, K, Ca, Mg, Silica, Oil & Grease. Bacteriological: MPN and Total coliform Heavy Metals (As, Hg, Pb, Cd, Cr6, Total Cr, Cu, Zn, Se, Fe).	13	Monthly	-
D. Land				
a. Soil quality	Classification, Texture, pH, Conductivity, Cation Exchange Capacity (CEC), N, P, K, Heavy Metals	10	One time	-
b. Land use	Land use classification	10 km-Study Area	One time	-
E. Flora & Fauna: Ecology & Biodiversity Study				
Terrestrial/Aquatic	Tree Quadrat Point count Plankton Study Line Transect	15 08 04 05	One time	-
F. Socio-economic parameters	Socio-economic study of the study area	10 km from the plant site	One time	Primary survey affected families
G. Traffic study	Traffic Assessment	03	One time	-

28.3.14: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration shall be furnished.

A. Summary of court cases

There are total 83 case related with Lara STPP, out of these 02 cases are related with Arbitration, 03 cases related to Civil Application, 07 cases related to Contract Matter, 02 cases related to Labour, 01 cases related to The Insolvency and Bankruptcy Code (IBC), 64 cases related to Land Acquisition, 02 Cases related to Land Acquisition/ROU, 01 cases related to Misc., & 01 case related with Service. There is no court case related with Environment etc.

B. Summary of Show Cause Notices: There are no Show Cause Notices pertaining to Environment & Forest.

C. Summary of violation: There is no violation case pertaining to the project under the Environment Protection Act, 1986; Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980; the Wildlife (Protection) Act, 1972.

28.3.15: Written submission: Project proponent submitted the following written submissions during the meeting:

S. No.

1. *PP needs to submit Solar Capacity Action Plan for Lara STPP*

S No	Location	Capacity	Status
01	Lara Stage- I	1164 Kw	Implemented
02	Lara Township	440 KW	Implemented
		340 KW	Under Erection
		1105 KW	Under Award
03	Lara Stage-II	1000 KW	Part of EPC Package

2. *PP shall submit details of Chimney height*

The Chimney height for Stage-II of Lara STPP will be 275 m without FGD in place of Chimney of 150/220m vide EC letter no for Lara STPP Stage-II :J-13012/11/2018-IA-I(T) dated 17.07.2023.

3. *PP shall submit the revised land use break up for Ash Pond area*

S.N.	Description	Stage-I (Ha)	Stage-II (Ha)	Stage-III (Ha)	Total (Ha)
1	Main Plant	157.89	107.69	71.66	337.24
2	Ash Dyke	168.02	0.00	125.00	293.02
	Sub Total (Plant & Ash Dyke)	325.91	107.69	196.66	630.26
3	Green Belt	90.88	12.71	103.44	207.03
	Green Belt (%) of Main Plant & Ash Dyke Area	27.88	11.80	52.60	33.00
4	Reservoir	54.66	23.89	0.00	78.55
5	Township	61.13	0.00	0.00	61.13
6	Peripheral Road (Public)	49.8	16.32	4.34	70.46
7	Ash Corridors	21.39	0.00	0.00	21.39
8	Rly Siding	31.17	6.62	2.23	40.02
9	Make-up water PH Area	2.85	0.00	0.00	2.85
10	Ash Brick Plant	0.00	0.00	2.83	2.83
	Total Project land (except green belt in Ha)	546.91	154.52	206.06	907.49
11	Green belt outside plant(NTPC acquired land)	0.00	87.04	26.32	113.36
	Total (Ha)	**637.79**	**254.27**	**335.82**	**1227.88**

Note:

1. Common Property Resource Land (40.89 Ha) handed over to respective village.
2. The green belt on 202.03 Ha will be developed inside the plant boundary i.e: 33 % of the Main Plant and Ash Dyke area. Green belt of 320.39 Ha inside and outside of plant on NTPC acquired land accounting to 35.3 % of the total project land .

4. *PP shall disclose the Distance of NTPC Lara from Non-attainment cities in state of Chattisgarh and Odisha as per CPCB list*

Nearest non-attainment city is Korba which is at 99 Km from NTPC Lara.

City	Aerial distance from NTPC Lara	City	Aerial distance from NTPC Lara	City	Aerial distance from NTPC Lara
Korba	98.9 Km	Talcher	203.15 Km	Cuttack	290 Km
Bhilai	227.07 Km	Angul	198 Km	Rourkela	154 Km
Raipur	197.44	Bhubneshwar	294.4 Km		

Observations and deliberation of the EAC

28.3.16: The Committee observed and noted the following:

i. Instant proposal is seeking for Expansion of Lara Super Thermal Power Project from 3200 MW [Stage-I (2x800 MW) & Stage-II (2x800 MW)] to 4800 MW by adding two units of 800 MW (2x800 MW) under Lara Super Thermal Power Project, Stage-III (2x800 MW) by M/s NTPC Limited located at Villages Armuda, Chhapora, Bodajhariya, Mahloi, Riyapalli, Kandagarh. Devalpura, Ghutkupali, Thengapali, Lara in Tehsil Pussore, District Raigarh and Village Saradih in Tehsil Dabhara, District Sakti, Chhattisgarh.

ii. The existing "2x800 MW Coal Based Lara Super Thermal Power Project" was accorded environmental clearance vide file.no J 13012/79/2007-IA. II(T) dated 13.12.2012 from MOEF&CC. Consent to Operate for the existing unit was accorded by Chhattisgarh Environment Conservation Board, Raipur, (C.G.) vide No 1109/TS/CECB/2025 dated 29.04.2025. The validity of CTO is up to 30.04.2026. "2x800 MW (Expansion, Stage-II) Coal Based Lara Super Thermal Power Project" was accorded environmental clearance vide EC ID No EC23A0601CG5636268E dated 17.07.2023 from MOEF&CC is under construction. Consent to Establish for the existing units of Stage-II was accorded by Chhattisgarh Environment Conservation Board, Raipur, (C.G.) vide No. 3168/TS/CECB/2024 dated 12.07.2024. The validity of CTE is up to 11.07.2029.

iii. Total Forest Land Involved is 163.11 ha. Lara STPP Stage-I: 151.762 ha (Forest Clearances have already been accorded by MoEF&CC vide Letter no. F.NO.8-21/2012-FC dated 12.05.2014). Lara STPP Stage-III: 11.35 Ha of (Chote Jhad ke Jungle) in Stage-III (Proposal for Forest Clearance was already submitted vide Proposal No FP/CG/IND/542991/2025 date 27.06.2025 which is under process).

iv. The EAC also took into consideration the drone survey of the project site and KML file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH.

v. There is no ESZ, National parks, Wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site as ascertained from DSS.

vi. Existing Water requirement of Stage-I is 4830 m^3/hr (1,15,920 KLD) and Stage-II is 4800 m^3/hr (1,15,200 KLD). The water requirement for the proposed Lara STPP Stage-III is estimated as 1600 m^3/hr (38,400 KLD). Water Resource Department (WRD), Government of Chhattisgarh have accorded permission for water allocation of 45 MCM (5137 m^3/hr) for stage-I (2x800 MW) power project vide letter 8734 dated 02.12.2010 and vide letter 4570 dated 10.06.2013 for 68 MCM (7763 m^3/hr) for Stage-II for Lara STPP from Saradih barrage on river Mahanadi. Water Requirement of Stage-III shall be meet from existing allocation of Water for Stage-I & II. The water will be transported to the plant site through pipeline from 38 km of distance. The specific water consumption for the power plant will be maintained by 3.0 m^3/MWhr.

vii. Existing power requirement of Stage-I & II is 230 MW which are obtained from Lara STPP. The power requirement for the proposed project Stage-III is estimated as 116 MW, which will be obtained from the Lara STPP.

viii. The capital cost of the proposed Stage-III project is Rs. 20,500.00 Cr (At Current Cost level including GST.) and the capital cost for environmental protection measures is proposed as Rs.

3101.40 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 62.03 Crores.

ix. Coal requirement for the Stage-III of the project is estimated at about 6.5 MTPA corresponding to 85% PLF considering GCV of 3000-4000 Kcal/Kg. After meeting the coal requirement of Stage-I and Stage-II, 4.5 MTPA Coal shall be available for Stage-III from Talaipalli Coal Block. Coal linkage for balance requirement (2 MTPA) need to be obtained/to be tie up.

x. Greenbelt area in proposed Lara STPP Stage-III is 103.44 ha which is about 52.60 % of 196.66 ha [Main Plant (Stage-III) & Ash Dyke Area (Stage-III)]. Thus, total of 207.03 ha area (33.00 % of 630.26 ha [Main Plant (Stage-I, II &II) & Ash Dyke Area (Stage-I&III)] will be developed as greenbelt as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 4,71,475 saplings will be planted and nurtured in 207.03 hectares in 05 years.

xi. Schools are located in range of 0.38 Km to 2.1 Km from the plant boundary. Health centres are located at a distance of 0.5 km to 3.96 km from the plant boundary. A dense greenbelt, comprising native and pollution tolerant species, shall be developed around the plant boundary. Vegetative buffers act as natural air filters and noise retarders. In addition, windshield curtains and dust containment structures shall be installed at coal and ash handling areas to minimize particulate escape toward habitations.

xii. The project site is not located within the Critically Polluted Area (CPA) / Severally Polluted Area (SPA) as per CEPI assessment 2018 of CPCB.

xiii. Committee deliberated on the existing ash management and observed that the percentage of ash utilization for the FY 2024-25 was 110%. For proposed unit, the estimated ash generation would be 3200000 MTPA and would be utilized by 100%. A new ash pond of 125 ha is envisaged for the proposed Lara Stage-III project.

xiv. Zero liquid discharge (ZLD) will be adopted for the proposed plant using suitable effluent treatment plant, sludge thickener and RO systems.

xv. EAC deliberated on construction of stack height and observed that stack height of stage II and stage III chimney would be 275 m without FGD as per the provisions contained under Notification no GSR 465 (E) dated 11/07/2025.

xvi. EAC suggested to revisit and reduce the area of proposed ash dyke from 160 ha to 125 Ha for proposed Lara Stage-III expansion project and to submit the revised land use breakup details for the same.

xvii. EAC suggested to revisit the land utilization for Green belt development and advised for plantation within the project site but not 5km away from the project boundary.

xviii. EAC suggested to develop the Ash dyke /pond away from the Water bodies/nala.

xix. Kelo River is located at 0.7 Km of the project boundary. Authenticated HFL data of the water body as per MoEF&CC O.M. dated 14/02/2022 shall be furnished.

xx. EAC deliberated on Solar installation status by the PP and noted that 1164 KW solar installation is implemented in Stage I, in Lara Township 440 KW is implemented and 340 KW is under erection and 1105 KW is under awarding process. In Stage-II, 1000 KW solar installation is kept as a part of EPC Package.

xxi. PP shall calculate total carbon emission and sequestration in the proposed plant and the same shall be mentioned during the EC application.

xxii. The committee noted that there are 83 court case related with Lara STPP, however, no court case is related with Environment.

xxiii. The baseline data were collected from March to May 2025.

xxiv. The EAC also deliberated on the written submission of the project proponent, and found it satisfactory.

xxv. EAC opined that there should be a site visit by the Sub-committee of EAC to see the various environmental issues pertaining to the instant project before consideration of EC proposal.

xxvi. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

Recommendations of the Committee:

28.3.17: The EAC after detailed deliberations on the information submitted and as presented during the meeting ***recommended*** the proposal for grant of ToR for conducting an EIA study for the above project **subject to uploading of written submission** on PARIVESH Portal under the provisions of the EIA Notification, 2006, as amended along with the following specific ToR in addition to the generic ToRs.

[A] Environmental Management and Biodiversity Conservation

i. Project proponent shall submit stage I FC (or) status of stage I FC for 11.35 Ha of forest land as per the provision contained under MoEF&CC O.M. dated 09/09/2011 and its amendments.

ii. A Cumulative Environmental Impact Assessment study of all the existing and proposed projects in the 10-km radius of the proposed project shall be conducted and the same shall be included the in EIA/EMP report. Details of industrial units present in 10 Km radius of the power plant shall be earmarked in map and submitted.

iii. Certified compliance report containing compliance to the prescribed EC conditions for the 2x800 MW (Stage I) and 2x800MW (Stage II) as per the MoEF&CC O.M. dated 08/06/2022 shall be submitted.

iv. Project Proponent shall explore the feasibility of using treated sewage from Sewage Treatment Plants located within 50 km radius of the proposed project as an alternative to the fresh water source to minimize the freshwater drawl from surface water bodies. Action plan in this regard shall be submitted.

v. Project proponent shall explore the feasibility of using air cooled condenser in place of water-cooled condenser and details shall be incorporated in the final EIA/EMP report.

vi. Project proponent shall optimize the land requirement for the proposed ash pond and design details of the same shall submitted in the EIA/EMP report.

vii. Certificate from concerned District Magistrate/Executive Engineer from the State Water Resources department (or) any officer authorized by the State Government in this regard shall be submitted stating that project site is not located within flood plain corresponding to one in 25 years of flood as per Ministry's O.M. dated 14/02/2022.

viii. All the parameters as mentioned in the National Ambient Air Quality Standards (NAAQS) shall be monitored by the project proponent.

ix. Project proponent shall also obtain recommendations from the State Forest department regarding the impact of project on the nearby Reserved Forests, if any, along with the mitigation measures to be followed.

x. EIA/EMP study shall take into consideration the different scenarios arising due to change of coal source, impact on environmental attributes due to change of coal source along with corresponding mitigation measures with EMP budget shall be submitted.

xi. Biodiversity analysis of the project site and study area shall be done through any NABET accredited consultant. The study report shall inter-alia include impact of release of cooling tower water on aquatic life and action plan for complying with the mitigation measures shall be submitted.

xii. Project proponent shall commission a study on Hydrology and Hydrogeology of the project site as well as the study area of the project site through a NABET accredited consultant. The study report along with the action plan for implementing the recommendations of the report shall be submitted along with the EIA/EMP report.

xiii. Radioactivity studies along with coal analysis to be provided (sulphur, ash percentage and heavy metals including Pb, Cr, As and Hg). Details of auxiliary fuel, if any including its quantity, quality, storage, etc should also be given.

xiv. PP should submit the detailed plan in tabular format (year-wise) for concurrent afforestation and green belt development in and around the project site covering 33 % of the project area. The PP should submit the number of saplings to be planted, names of native species, area to be covered under afforestation & green belt, location of plantation, target for survival rate and budget earmarked for the afforestation & green belt development. The capital and recurring expenditure to be incurred needs to be submitted. Plantation plan should be prepared in such a way that 80% of the plantation to be carried out in first 5 years and for the remaining years the proposal for gap filling. The seedling should be of native and few fruit bearing species mainly, of height not less than 2 meters to be selected and accordingly cost of plantation needs to be decided.

xv. Action plan for development of three-tier plantation programme (33.0% of total project cover area) along the periphery of the project boundary and the coal transportation route shall be provided. PP shall submit concurrent plantation plan.

xvi. Detailed action plan shall be prepared for maintenance of air pollution control equipment for proposed units and shall be incorporated in the EIA/EMP report.

xvii. Details of Ash management plan as per MoEF&CC notification dated 31/12/2021 & its subsequent amendment for the proposed project shall be submitted. MoU signed for ash utilization with companies shall be submitted.

xviii. Action plan for dry ash collection system (Bottom ash and Fly ash) shall be submitted.

xix. Action plan for disposal of ash through High Concentration Slurry Disposal (only in emergency conditions) shall be submitted.

xx. Proper protection measures like high-density polyethylene (HDPE) lining, appropriate height of bund and adequate distance between the proposed Ash pond and water body (minimum 60 meters) etc. shall be planned to reduce the possibility of mixing leachate with any freshwater body for ash pond. A high-density Slurry disposal plan shall be prepared.

xxi. Pond and ground water quality (10 locations within 2 km radius of the plant boundary) shall be studied, and report be submitted along with EIA/EMP. Action plan for Ground water monitoring stations on all hotspots like schools/hospitals within 2 km radius of the plant boundary be submitted. Baseline Study for Heavy metals in Groundwater, Surface water and soil to be carried out and incorporated in EIA/EMP report.

xxii. Details pertaining to water source, treatment and discharge should be provided.

xxiii. PP shall provide the details of wastewater treatment facilities to be installed within its capacity, timeline and budget.

xxiv. Project Proponent to conduct Environmental Cost Benefit Analysis for the project in EIA/EMP Report.

xxv. An action plan shall be prepared for Water shed development within 10 km radius of the plant boundary in consultation with reputed government institution and incorporated in EIA/EMP report.

xxvi. PP should clearly bring out that what is the specific diesel consumption ~ (Liters/Tonne of total material handled) and steps to be taken for reduction of the

same. The year-wise target for reduction in the specific diesel consumption needs to be submitted. PP shall also explore the possibility of using e-vehicles/LNG/CNG-based machinery and trucks for the operation and transportation of Coal and ash and submit an implementation strategy.

xxvii. PP shall provide the details of transportation of fly ash from the plant, transportation route etc. Further, carry out a traffic study for at least one month and provide the impact of transportation along with the mitigation measures.

xxviii. PP shall submit the action plan to adhere to the Plastic Waste Management Rules 2016 and to adhere Ministry's OM dated 18/07/2022.

xxix. Details on renewable energy (solar plant) proposed to be installed as energy conservation measures and action plan for the same shall be submitted.

xxx. The input parameters for the AAQ modelling and the influence of various combinations of these on the AAQ must be reported in the EIA/EMP Report. In addition to the Wind Rose diagram collected for one season during the preparation of the E.I.A., wind rose diagram for all seasons must be provided using secondary data from sources such as IMD/CPCB etc.

xxxi. Project proponent shall take all necessary steps to control the Air Quality and take additional mitigation measures for proposed TPP to maintain the Ambient Air Quality values within the limits. The action plan regarding maintaining ambient quality standards (Time weighted average for 24 hours and Annual both) be submitted. Further, project proponent shall submit an undertaking to abide by the provisions of the notification number G.S.R 465 (E) dated 11/07/2025 related to FGD, as amended, and any subsequent amendment there of pursuant to the outcome of study carried out by CPCB in this regard.

xxxii. Details of air pollution control devices to be installed in the proposed 2x800 MW TPP along with its maintenance schedule shall be incorporated in EIA/EMP report.

xxxiii. Carbon emission due to TPP and allied carbon sequestration/ carbon offsetting plan be submitted.

xxxiv. PP is advised to implement the *'Ek Ped Maa Ke Naam'* Campaign, which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than green belt development. An action plan in this regard shall be submitted.

[B] Disaster Management

i. A Disaster Management Plan shall be prepared and incorporated in the EIA/EMP report.

[C] Socio-economic study

i. Public Health Action Plan including the provisions for drinking water supply for the local population shall be in the EIA/EMP Report. The status of the existing medical facilities in the project area shall be discussed. Possibilities of strengthening of existing medical facilities, construction of new medical infrastructure etc. will be explored after assessing the needs of the labour force and local populace.

ii. Public consultation (Public Hearing and Written submission) shall be conducted as per the provisions of EIA Notification, 2006 and as amended. As per the Ministry's OM dated 30.09.2020, to address the concern raised during the Public Hearing, the Project Proponent is required to submit the detailed activities proposed with year wise budgetary provision (Capital and recurring) for 5 years. Activities proposed shall be

part of EMP. Tentative no. of project affected families (if any) shall be identified and accordingly appropriate Rehabilitation &Resettlement plan shall be prepared. The recommendation Socio-economic study may also be considered while planning the activities & budget.

iii. A need based Social Impact Assessment Study shall also be carried out and an action plan on its recommendations may also be submitted with budgetary provisions.

iv. Demographic details and land use change details in 10 km area shall be submitted.

[D] Miscellaneous

i. Plot the wind rose diagram using the Typical Meteorological Year (TMY) data for the period considered for the study. The monitoring units shall be deployed in the field based on the coverage area ratio and direction of the wind. A mathematical model shall be developed for the local site rather than using the standard model available in software for both air & water quality modelling.

ii. PP shall align its activities to one/few of the Sustainable Development Goals (SDG) and start working on the mission of net zero by 2050. PPs shall update the same to the EAC.

iii. PP shall submit the EIA/EMP report after the plagiarism check using authenticated plagiarism software.

iv. Detailed description of all the court cases along with its current status shall be submitted.

v. PP should provide in the EIA Report details of all the statutory clearances, permissions, no objection certificates, consents etc. obtained for this project under various Acts, Rules and regulations shall be submitted. Further, all the permissions/MoUs obtained for this project shall be revalidated and submitted along with the EIA/EMP report.

vi. The PP should submit the photograph of monitoring stations & sampling locations. The photograph should bear the date, time, latitude & longitude of the monitoring station/sampling location. In addition to this PP should submit the original test reports and certificates of the labs, which will analyse the samples.

vii. PP should clearly bring out the details of the manpower to be engaged for this project with their roles /responsibilities/designations. In addition to this PP should mention the number and designation of persons to be engaged for the implementation of environmental management plan (EMP). The capital and recurring expenditure to be incurred needs to be submitted.

viii. PP should submit the year-wise, activity wise and time-bound budget earmarked for EMP, occupational health surveillance, and activities proposed to address the issues raised during Public Hearing. The capital and recurring expenditure to be incurred needs to be submitted.

ix. Activities shall be prepared based on the issues arise during public hearing conducted and fresh written submission with defined timeline and budgetary provisions.

x. Aerial view video of project site and coal transportation route proposed for this project shall be recorded through drone and be submitted.

xi. The PP should ensure that only NABET-accredited consultants shall be engaged for the preparation of EIA/EMP Reports. PP shall ensure that the accreditation of the consultant is valid during the collection of baseline data, preparation of EIA/EMP report and the appraisal process. The PP and consultant should submit an undertaking the information and data provided in the EIA Report and submitted to the Ministry are factually correct and the PP and consultant are fully accountable for the same.

xii. PP should provide in the EIA Report details of the statutory clearances, permissions, no objection certificates, consents etc. required for this project under various Acts, Rules and regulations and their status or estimated timeline after the grant of EC.

xiii. All the certificates viz. involvement of Forestland, distance from the protected area, and list of flora & fauna should be duly authenticated by the Forest Department. The Certificate should bear the name, designation, official seal of the person signing the certificate and dispatch number.

xiv. The findings of the subcommittee report shall be incorporated in the final EIA/EMP report.

Agenda No. 28.4

28.4 Proposed 2x800 MW Coal based Ultra Super Critical Thermal Power Project (TPP) by **M/s Mirzapur Thermal Energy (UP) Private Limited (MTEUPPL)** located at Village Dadri Khurd, Tehsil, Mirzapur Sardar, **District Mirzapur, Uttar Pradesh - Environmental Clearance-regarding.**

[Proposal No. IA/UP/THE/542333/2025, F.No. J-13012/12/2011-IA.II (T)]

28.4.1: M/s. Mirzapur Thermal Energy (UP) Private Limited (MTEUPPL), a subsidiary of Adani Power Limited, has made an online application vide proposal no. IA/UP/THE/542333/2025 Dated 26/06/2025 along with copy of EIA/EMP report, Form and seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at item no. 1(d) Under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level. The project do not attract the provisions of general condition of the EIA Notification, 2006.

Name of the EIA consultant: M/s Gaurang Environmental Solutions Pvt. Ltd. Certificate No. NABET/EIA/2326/RA 0338 Valid up to: 07.12.2026.

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

28.4.2: The Project Site for instant proposal was earlier accorded EC by MoEF&CC vide letter no. J-13012/12/2011-IA.II(T) dated 21.08.2014 and CTE was obtained from UPPCB. The Hon'ble National Green Tribunal vide its judgement dated 21.12.2016 in the matter Appeal No 79 of 2014 titled as Debadityo Sinha vs. Mirzapur Energy (UP) Pvt. Ltd. & Others quashed the EC dated 21.08.2014 and the project could not be implemented further and the validity of the EC got lapse. Meanwhile, the project was acquired by Mirzapur Thermal Energy (UP) Private Ltd., a subsidiary of Adani Power Limited (APL) and submitted a fresh proposal for grant of EC by de-novo under the provisions of the EIA Notification, 2006.

28.4.3: The project by M/s Mirzapur Thermal Energy (UP) Private Limited (MTEUPPL) is located at Village Dadri Khurd, Tehsil Mirzapur Sadar, District Mirzapur, Uttar Pradesh, is for setting up a new power plant with a capacity of 2x800 MW coal-based Ultra Supercritical Technology.

28.4.4: Status of installation of Flue Gas Desulphurization shall be furnished as per the MoEF&CC Notification dated 11/07/2025:

i. Categorization details of TPP: M/s. Mirzapur Thermal Power Project Site is located at about 19 Km distance from the Mirzapur town (DM office). The nearest CPA/SPA is Varanasi, at distance of approx. 45.46 Km as per the DSS portal, therefore Mirzapur TPP falls under the **Category 'C'** as per CPCB categorization with respect to FGD installation.
ii. Sulfur content of the coal to be fired in the boiler: **<0.5%**
iii. Status of FGD installation for existing unit: **Not applicable.**
iv. Action plan for installation of new stack in compliance to the notification number GSR 742 (E) dated the 30/08/1990 for the proposed project: As per MoEFCC notification dated 11.07.2025, 275 m high Chimney (Twin flue) is proposed and proponent will abide by and adhere to all the Notifications/ Directives issued by the MoEFCC from time to time regarding the TPP.

28.4.5: The detail of the ToR is furnished as below:

Proposal No with date	Consideration	Details	Date of accord	ToR Validity
IA/UP/THE/467671/2024 dated 08/05/2024	10th meeting of EAC-Thermal held on 10.06.2024	Terms of Reference	29.07.2024	28.07.2028

28.4.6: Environmental site settings

<table>
<tr><th>S. No.</th><th>Particulars</th><th colspan="2">Details</th><th>Remarks</th></tr>
<tr><td>1.</td><td>Total land</td><td colspan="2">365.19 hectare
[Private: 333.81 ha; Govt.: 31.38 ha, Agriculture: 0.ha]</td><td></td></tr>
<tr><td rowspan="11">2</td><td rowspan="11">Land use break-up</td><td>Facilities</td><td>Area (in hectares)</td><td rowspan="11">In addition to the 365.19 Ha, there is a Forest land Outside the Project boundary is 8.3581 Ha which includes water pipeline (5.8162 Ha) and approach road (2.5419 Ha). Forest proposal is under progress vide proposal no. FP/UP/THE/14236/2015.

The above approach road connects the project site with SH-5. Hence, the 8.3581 Ha of forest land as mentioned above is considered as a material component of the project as observed in the judgement dated 21/12/2016 of Hon'ble NGT in Appeal No 79 of</td></tr>
<tr><td>Main Plant</td><td>85.80</td></tr>
<tr><td>Coal Handling System</td><td>64.14</td></tr>
<tr><td>Water System</td><td>33.18</td></tr>
<tr><td>Switch Yard</td><td>NIL*</td></tr>
<tr><td>Green Belt</td><td>121.13</td></tr>
<tr><td>Roads (inside plant)</td><td>NIL*</td></tr>
<tr><td>Township</td><td>11.57</td></tr>
<tr><td>Ash Pond</td><td>49.37</td></tr>
<tr><td>Railway Siding</td><td>Not envisaged. Wagon Tippler/ Track hopper facility will be provided within the Plant</td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>Water Supply Pipeline</td><td>Water Source from Ganga River and Intake point at Upper Khajuri Dam, about 32.6 Km from Plant boundary</td></tr>
<tr><td>Ash Transport Pipeline</td><td>NIL*</td></tr>
<tr><td>Others</td><td>NIL</td></tr>
<tr><td>Total</td><td>365.19</td></tr>
<tr><td colspan="2">* Included in main plant area</td></tr>
</table>
</td><td>2014.</td></tr>
<tr><td>3.</td><td>Land acquisition details as per MoEF&CC O.M, dated 7/10/2014 & 19/02/2025</td><td>The land is already in possession with Mirzapur Thermal Energy (UP) Private Limited except 31.38 Ha Govt Land. For 31.38 Ha land transfer and mutation is under progress at Revenue Dept, Vindhyachal Division, District Mirzapur Order No. 19957/2022 dated; 10.10.2024.</td><td>Land Documents are submitted along with EC application.</td></tr>
<tr><td>4.</td><td>Existence of habitation& involvement of R&R, if any.</td><td><u>Project site</u>: Name of village (if any) – Nil. No R&R.
Study Area:
<table>
<tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Garhawa</td><td>2.0 Km</td><td>Northeast</td></tr>
<tr><td>Ukhdand</td><td>2.1 Km</td><td>North of Northwest</td></tr>
<tr><td>Darhiram</td><td>2.6 Km</td><td>Northeast</td></tr>
<tr><td>Umaria</td><td>2.1 Km</td><td>North</td></tr>
<tr><td>Marihan</td><td>4.3 Km</td><td>Southwest</td></tr>
<tr><td>Dadri Khurd</td><td>1.36 Km</td><td>Southeast</td></tr>
<tr><td>Danti</td><td>1.0 Km</td><td>South of Southwest</td></tr>
<tr><td>Birohiya</td><td>2.28 Km</td><td>North</td></tr>
</table>
</td><td>R&R is not involved.</td></tr>
<tr><td>5</td><td>Existence of school and hospital if any.</td><td><u>A. School</u>
Project site: NIL
Study Area: As Below
<table>
<tr><th>School</th><th>Distance (Km)</th><th>Direction</th></tr>
<tr><td>Ordial Institute Campus - Private educational institution, Danti,</td><td>1.35</td><td>SSW</td></tr>
<tr><td>Rajkiya Ashram Paddhati Balika Vidhyalaya, Danti,</td><td>2.4</td><td>S</td></tr>
<tr><td>Prathmik Vidyalaya-Umariya</td><td>2.8</td><td>NNE</td></tr>
</table>
<u>B. Hospital</u></td><td></td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>Project site: NIL
Study Area: As Below
<table>
<tr><th>School</th><th>Distance (Km)</th><th>Direction</th></tr>
<tr><td>CHC Marihan, Mirzapur - Government Hospital.</td><td>4.6</td><td>SSE</td></tr>
</table></td><td></td></tr>
<tr><td>6.</td><td>Latitude and Longitude of all corners of the project site.</td><td>A. Plant site
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>1</td><td>24°59'43.10"N</td><td>82°41'1.32"E</td></tr>
<tr><td>2</td><td>24°59'15.67"N</td><td>82°40'48.65"E</td></tr>
<tr><td>3</td><td>24°59'16.22"N</td><td>82°40'32.70"E</td></tr>
<tr><td>4</td><td>24°59'0.36"N</td><td>82°40'31.30"E</td></tr>
<tr><td>5</td><td>24°58'59.94"N</td><td>82°40'21.69"E</td></tr>
<tr><td>6</td><td>24°58'43.86"N</td><td>82°40'21.29"E</td></tr>
<tr><td>7</td><td>24°58'44.48"N</td><td>82°40'0.15"E</td></tr>
<tr><td>8</td><td>24°58'34.88"N</td><td>82°39'59.91"E</td></tr>
<tr><td>9</td><td>24°58'34.59"N</td><td>82°40'10.54"E</td></tr>
<tr><td>10</td><td>24°58'27.30"N</td><td>82°40'8.78"E</td></tr>
<tr><td>11</td><td>24°58'14.57"N</td><td>82°39'55.42"E</td></tr>
<tr><td>12</td><td>24°58'6.36"N</td><td>82°39'44.21"E</td></tr>
<tr><td>13</td><td>24°58'23.71"N</td><td>82°39'48.52"E</td></tr>
<tr><td>14</td><td>24°58'25.44"N</td><td>82°39'50.05"E</td></tr>
<tr><td>15</td><td>24°58'33.97"N</td><td>82°39'46.94"E</td></tr>
<tr><td>16</td><td>24°58'37.62"N</td><td>82°39'47.94"E</td></tr>
<tr><td>17</td><td>24°58'39.68"N</td><td>82°39'45.63"E</td></tr>
<tr><td>18</td><td>24°58'48.52"N</td><td>82°39'44.25"E</td></tr>
<tr><td>19</td><td>24°59'0.89"N</td><td>82°39'49.86"E</td></tr>
<tr><td>20</td><td>24°59'12.52"N</td><td>82°39'57.77"E</td></tr>
<tr><td>21</td><td>24°59'36.31"N</td><td>82°39'57.84"E</td></tr>
<tr><td>22</td><td>24°59'42.80"N</td><td>82°39'55.48"E</td></tr>
<tr><td>23</td><td>24°59'48.80"N</td><td>82°40'4.67"E</td></tr>
<tr><td>24</td><td>24°59'53.60"N</td><td>82°40'2.03"E</td></tr>
<tr><td>25</td><td>24°59'56.49"N</td><td>82°40'9.78"E</td></tr>
<tr><td>26</td><td>25° 0'1.35"N</td><td>82°40'14.57"E</td></tr>
<tr><td>27</td><td>25° 0'6.56"N</td><td>82°40'17.38"E</td></tr>
<tr><td>28</td><td>25° 0'4.58"N</td><td>82°40'23.19"E</td></tr>
<tr><td>29</td><td>25° 0'9.45"N</td><td>82°40'25.50"E</td></tr>
<tr><td>30</td><td>25° 0'10.07"N</td><td>82°40'24.11"E</td></tr>
<tr><td>31</td><td>25° 0'14.85"N</td><td>82°40'26.43"E</td></tr>
<tr><td>32</td><td>25° 0'14.09"N</td><td>82°40'28.29"E</td></tr>
<tr><td>33</td><td>25° 0'15.05"N</td><td>82°40'28.98"E</td></tr>
<tr><td>34</td><td>25° 0'9.57"N</td><td>82°40'42.06"E</td></tr>
<tr><td>35</td><td>25° 0'10.76"N</td><td>82°40'42.96"E</td></tr>
<tr><td>36</td><td>25° 0'4.33"N</td><td>82°40'49.13"E</td></tr>
<tr><td>37</td><td>25° 0'0.20"N</td><td>82°40'46.22"E</td></tr>
<tr><td>38</td><td>24°59'58.98"N</td><td>82°40'51.13"E</td></tr>
<tr><td>39</td><td>24°59'57.20"N</td><td>82°40'50.02"E</td></tr>
<tr><td>40</td><td>24°59'54.74"N</td><td>82°40'55.39"E</td></tr>
<tr><td>41</td><td>24°59'49.00"N</td><td>82°40'51.94"E</td></tr>
<tr><td>42</td><td>24°59'45.52"N</td><td>82°40'55.23"E</td></tr>
</table></td><td></td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>43</td><td>24°59'43.90"N</td><td>82°40'53.55"E</td></tr>
</table>
B. Ash pond
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>24°59'52.57"N</td><td>82°40'18.16"E</td></tr>
<tr><td>B</td><td>25° 0'5.61"N</td><td>82°40'18.27"E</td></tr>
<tr><td>C</td><td>25° 0'4.65"N</td><td>82°40'23.03"E</td></tr>
<tr><td>D</td><td>25° 0'9.40"N</td><td>82°40'25.52"E</td></tr>
<tr><td>E</td><td>25° 0'10.13"N</td><td>82°40'24.16"E</td></tr>
<tr><td>F</td><td>25° 0'14.84"N</td><td>82°40'26.44"E</td></tr>
<tr><td>G</td><td>25° 0'14.10"N</td><td>82°40'28.34"E</td></tr>
<tr><td>H</td><td>25° 0'15.10"N</td><td>82°40'29.03"E</td></tr>
<tr><td>I</td><td>25° 0'9.56"N</td><td>82°40'42.06"E</td></tr>
<tr><td>J</td><td>25° 0'10.73"N</td><td>82°40'42.99"E</td></tr>
<tr><td>K</td><td>25° 0'4.36"N</td><td>82°40'49.10"E</td></tr>
<tr><td>L</td><td>25° 0'0.20"N</td><td>82°40'46.18"E</td></tr>
<tr><td>M</td><td>25° 0'0.13"N</td><td>82°40'49.58"E</td></tr>
<tr><td>N</td><td>24°59'58.97"N</td><td>82°40'51.13"E</td></tr>
<tr><td>N</td><td>24°59'57.17"N</td><td>82°40'50.05"E</td></tr>
<tr><td>O</td><td>24°59'54.77"N</td><td>82°40'55.43"E</td></tr>
<tr><td>P</td><td>24°59'52.43"N</td><td>82°40'53.24"E</td></tr>
</table>
</td><td></td></tr>
<tr><td>7.</td><td>Elevation of the project site</td><td>Minimum: 169 m AMSL
Maximum: 214 m AMSL
Average: 193 m AMSL</td><td></td></tr>
<tr><td>8.</td><td>Involvement of Forest land if any.</td><td>No forest land is involved within Project /Plant Area. NOC regarding non-involvement of forest land has been issued by Forest Office Mirzapur vide letter no. 4229/Mirzapur/15 dated 30.05.2025.</td><td>However, Forest land Outside the Project boundary is 8.3581 Ha which includes water pipeline (5.8162 Ha) and approach road (2.5419 Ha). Forest proposal is under progress vide proposal no. FP/UP/THE/14236/2015</td></tr>
<tr><td>9.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td><u>Project site: Nil</u>
Study area:
<table>
<tr><th>S.No</th><th>Particulars</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td>1</td><td>Unnamed Seasonal Nala</td><td>Adjacent to the site</td><td>W</td></tr>
<tr><td>2</td><td>Jogldari Nala</td><td>1.9</td><td>SE</td></tr>
<tr><td>3</td><td>Jamthwa Nadi</td><td>2.2</td><td>WSW</td></tr>
<tr><td>4</td><td>Pahiti Nadi</td><td>3.6</td><td>NNE</td></tr>
<tr><td>5</td><td>Kuardari Nadi</td><td>6.0</td><td>W</td></tr>
<tr><td>6</td><td>Amjhar Nala</td><td>6.4</td><td>WSW</td></tr>
<tr><td>7</td><td>Upper Khajuri Dam</td><td>6</td><td>W</td></tr>
<tr><td>8</td><td>Dhenkwan Dam</td><td>6.2</td><td>E</td></tr>
<tr><td>9</td><td>Imiliya Bandhwa</td><td>9.82</td><td>E</td></tr>
</table>
*Source: - All distances are taken with respect to</td><td>.</td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>S.O.I. Toposheet, which is pertinent to this project.</td><td></td></tr>
<tr><td>10.</td><td>Existence of ESZ/ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area</td><td><u>Study area</u>
Name of the ESZ/ESA: Nil
Status of Notification: NA
Distance of project from ESZ/ESA: NA
Authenticated map of ESZ projecting distance of ESZ from project site: NA
Status of NBWL approval: NA
List of Reserved and Protected Forests:
<table>
<tr><th>S. No.</th><th>Particulars</th><th>Distance (km)</th><th>Direction</th></tr>
<tr><td colspan="4">RF/PF</td></tr>
<tr><td>1</td><td>Mirzapur RF</td><td>Adjoining</td><td>SE</td></tr>
<tr><td>2</td><td>Danti RF</td><td>Adjoining</td><td>N</td></tr>
<tr><td>3</td><td>R.F. (Lodhpur)</td><td>4.0</td><td>NE</td></tr>
<tr><td>4</td><td>Patehra RF</td><td>5.6</td><td>SW</td></tr>
<tr><td>5</td><td>Sarson R.F.</td><td>5.6</td><td>SE</td></tr>
<tr><td>6</td><td>Dhanuhaw Pahar</td><td>5.8</td><td>ESE</td></tr>
<tr><td>7</td><td>Chacdlewakhurd R.F.</td><td>6.8</td><td>NE</td></tr>
<tr><td>8</td><td>Danti R.F.</td><td>6.9</td><td>NW</td></tr>
<tr><td>9</td><td>Karaunda R.F.</td><td>6.9</td><td>WSW</td></tr>
<tr><td>10</td><td>Malua R.F.</td><td>7.5</td><td>SW</td></tr>
<tr><td>11</td><td>Purainiyan R.F.</td><td>7.0</td><td>SE</td></tr>
<tr><td>12</td><td>Golhanpur R.F.</td><td>7.0</td><td>E</td></tr>
<tr><td>13</td><td>R.F. (Atraura)</td><td>8.1</td><td>N</td></tr>
<tr><td>14</td><td>Matihani R.F.</td><td>9.0</td><td>ESE</td></tr>
<tr><td>15</td><td>Patehar R.F.</td><td>9.2</td><td>WSW</td></tr>
<tr><td>16</td><td>Barkachhar R.F.</td><td>9.8</td><td>NW</td></tr>
</table>
No National Park, Sanctuary, Elephant/Tiger Reserve, or migratory routes/wildlife corridor exists within 10 km of the TPP.</td><td></td></tr>
<tr><td>11.</td><td>Archaeological sites monuments/ historical temples etc.</td><td>There are no Archaeological sites present within study area.</td><td></td></tr>
<tr><td>12.</td><td>Facility envisaged in CRZ area (Only for coastal power plant)</td><td>Name of the facility in CRZ area – Nil
Recommendations of CZMA – NA
Status of CRZ clearance – NA</td><td></td></tr>
<tr><td>13.</td><td>Involvement Of Critically Polluted Area/Severely Polluted area as per 2018 CEPI score</td><td>Involvement of CPA/SPA: Nil
Proximity to CPA/SPA: - Nil</td><td></td></tr>
</table>

28.4.7: The unit configuration and capacity of proposed project is given as below:

Sr. No.	Existing power plant configuration and capacity	**Proposed power plant configuration and capacity**	**Total**	**Technology adopted**
1	Nil	1600 (2x800) MW	1600 MW	Ultra Super Critical

28.4.8: The details of the fuel (Coal/LDO) requirement for the proposed project/ expansion cum proposed project along with its source and mode of transportation is given as below:

Details	**Fuel requirement (MTPA)**	**Source**	**Distance from site (Kms)**	**Mode of Transportation**	**Coal characteristics (Worst case scenario)**	**Linkage document**
Coal	6.4 (85% PLF)	Coal Mines of NCL / SECL / CCL & Commercial Coal Mines and e-auction.	Approx 200 Km	Rail	Ash <40 (%) Sulphur <0.50 (%) Moisture-13 (%) GCV - 3200-4300 Kcal/Kg	FSA and E-auction
LDO/ HSD	15000 KL per Annum	Local Market/Vendors	Approx. 40 Km	Road	Low Sulphur (3-5% mass)	Local Vendors

28.4.9: The water requirement for the proposed project is estimated as 76,800 m^3/day, out of which 76,800 m^3/day of fresh water requirement will be meet from the Ganga River. The Permission for drawl of surface water is obtained from WRD Uttar Pradesh for 36 MCM/Year (98,630 m^3/day) vide letter no. 3613/11-27-C.0-4-174/11 dated 09.10.2011. The water will be transported to the plant site through the pipeline. The specific water consumption for the proposed power plant will be <2.5 m^3/MWhr.

28.4.10: The power requirement for the proposed project is estimated as 7.5 MW during Construction Phase and will be obtained from nearby UP Electricity Board Sub-station.

28.4.11: Baseline Environmental Studies

<table>
<tr><th>Period</th><th colspan="3">October' 2024 to December 2024</th><th>Additional study (if any)</th></tr>
<tr><td>AAQ parameters at 11 Locations (min and max)</td><td colspan="3"><table><tr><th>Parameter</th><th>Min (µg/m³)</th><th>Max (µg/m³)</th></tr><tr><td>PM 2.5</td><td>22</td><td>41</td></tr><tr><td>PM 10</td><td>48</td><td>69</td></tr><tr><td>SO2</td><td>4.7</td><td>10.5</td></tr><tr><td>NOx</td><td>3.7</td><td>11.8</td></tr><tr><td>CO</td><td>0.04</td><td>0.454</td></tr></table></td><td></td></tr>
<tr><td>Incremental GLC level</td><td colspan="3"><table><tr><th>Parameter</th><th>Maximum GLC</th></tr><tr><td>PM10(µg/m³)</td><td>0.323 at 550 meters downwind</td></tr><tr><td>PM2.5(µg/m³)</td><td>0.084 at 550 meters downwind</td></tr><tr><td>SO2(µg/m³)</td><td>7.74 at 550 meters downwind</td></tr></table></td><td></td></tr>
</table>

<table>
<tr><th>Period</th><th>October' 2024 to December 2024</th><th>Additional study (if any)</th></tr>
<tr><td></td><td>
<table>
<tr><td>NO_X(µg/m^3)</td><td>6.33 at 550 meters downwind</td></tr>
</table>
Note:
• High Efficiency Electrostatic Precipitator (ESP) is proposed to install to meet PM emission as per the norms.
• For SO_2, 275m high Chimney is proposed. MoEFCC Notification dated 11.07.2025 shall be followed.
• SCR/SOFA with low NO_x burner to meet NO_x emission as per the norms.
</td><td></td></tr>
<tr><td>Ground water quality at 19 locations</td><td>pH: 6.69 to 7.79, Total Hardness (as CaCO3): 98 mg/l – 178 mg/l; Chlorides: 54 mg/l to 90 mg/l, Fluoride: BDL (Dl-0.1) mg/l, Heavy metals like Copper (as Cu) - BLQ(LOQ-0.01), Lead (as Pb) - BLQ (LOQ- 0.005), Cadmium (as Cd) - BLQ(LOQ-0.002), Chromium (as Cr) -
BLQ (LOQ-0.02), Arsenic (as As) - BLQ (LOQ-0.005) and Mercury (as Hg)- BLQ(LOQ-0.001).</td><td></td></tr>
<tr><td>Surface water quality at 07 locations</td><td>pH 7.26 to 7.75, Dissolved Oxygen (DO): 4.9 to 7.3 mg/l and BOD: 4- 8 mg/l. COD from 10 to 23 mg/l</td><td></td></tr>
<tr><td>Effluent generation details and its treatment</td><td>• Wastewater generation from TPP about 1080 KLD
• Mode of treatment & reuse – The wastewater will be treated in ETP 1200 KLD (Neutralization & Equalization) and treated wastewater will be utilized within the plant to achieve Zero Liquid discharge.
• Domestic wastewater generation will be 8 KLD – Domestic wastewater will be treated through STP 10 KLD (MBBR Technology).
• Mode of treatment & reuse - Treated water will be utilized for greenbelt and plantation purpose.</td><td>The project is based on Zero Liquid Discharge (ZLD).</td></tr>
<tr><td>Noise levels Leq (Day and Night) at 11 locations</td><td>The Leq values for day time was observed to be 52.3 to 49.2 dB (A), while during night time 44.0 to 40.2 dB (A).</td><td></td></tr>
<tr><td>Traffic assessment study findings</td><td>• Traffic study has been conducted for one month.
• Traffic study has been conducted at State Highway-5 which is at an aerial distance of about 1km towards WSW.
• Transportation of coal will be done by Rail.
The PCU is 525.5 PCU/day on State Highway-5 and level of service (LOS) is A.
<table>
<tr><th>Road</th><th>Volume (in PCU/Day)</th><th>Capacity (in PCU/Day)</th><th>Existing V/C Ratio</th><th>LOS</th><th>Performance</th></tr>
<tr><td>SH-5</td><td>525.5</td><td>15000</td><td>0.035</td><td>A</td><td>Excellent</td></tr>
</table>
PCU load after proposed project:
<table>
<tr><th rowspan="2">Road</th><th rowspan="2">Existing LOS</th><th colspan="4">Changed V/C and LOS after adding generated traffic from operational phase of proposed project</th></tr>
<tr><th>V</th><th>C</th><th>V/C</th><th>Modified LOS</th></tr>
<tr><td>S.H.-</td><td>A</td><td>525.5 +</td><td>15000</td><td>0.08</td><td>A</td></tr>
</table>
</td><td></td></tr>
</table>

<table>
<tr><th>Period</th><th>October' 2024 to December 2024</th><th>Additional study (if any)</th></tr>
<tr><td></td><td>
<table>
<tr><td>5</td><td>'Excellent'</td><td>762 = 1287.5</td><td></td><td></td><td>'Excellent'</td></tr>
</table>
Conclusion: The level of service will be A after including additional traffic due to the proposed project.
</td><td></td></tr>
<tr><td>Soil Quality at 11 Locations</td><td>pH range 7.81 to 8.12; Electrical conductivity (EC); 174 to 184 mhos/cm; Calcium: 198 to 274 mg/kg; Sodium:67 to 97 mg/kg; potassium: 88 to 162 /kg/ha; Nitrogen: 10.3 to 11.3 kg/ha; Phosphorous: 11.4 to 13.5 mg/kg; Cation Exchange Capacity (CEC): 2 to 2.6 meg/100gm; Magnesium: 24 to 134 mg/kg; Organic Matter: 0.80% to 0.89 %</td><td></td></tr>
<tr><td>Flora and fauna</td><td>22 Schedule I Species found in the buffer zone during field survey and secondary sources. Out of 22 Schedule I Species, 10 are mammals, 6 are avifauna and 6 herpeto-fauna.</td><td>Certified list of Flora & Fauna is received from DFO Mirzapur vide letter no. 4226/Mirzapur/15 dated 30.05.2025. Wildlife Conservation Plan has been prepared and submitted for further approval to the State Forest department.</td></tr>
<tr><td>Hydrogeology study</td><td>The action plan to address the recommendation of the Hydrogeology report and Watershed management plan are as below:
<table>
<tr><th>Sl. No.</th><th>Recommendations</th><th>Action Plan</th></tr>
<tr><td>1</td><td>Since the TDS value in W-13 well was slightly above the acceptable TDS limit, it is recommended to monitor that the TDS levels in the discharged water meet regulatory requirements to prevent any negative environmental impact from the plant's operations</td><td>Water quality monitoring shall be done once a month through NABL accredited laboratory to monitor TDS Level.</td></tr>
<tr><td>2</td><td>As the value of hardness as CaCO, in W-l groundwater sample was found to be above acceptable limit but within the permissible limit, a need for ongoing monitoring and potential remediation efforts can be suggested in the report.</td><td>Water quality monitoring shall be done once in a month engaging NABL accredited laboratory to track hardness as CaCO3 content and corrective/preventive actions will be taken based on findings in the report.</td></tr>
</table>
</td><td>Consultant details: The hydrogeology study report has been prepared by M/s. Akshar Geo Services Pvt. Ltd & Vetted by NIT Delhi.</td></tr>
</table>

Period	October' 2024 to December 2024			Additional study (if any)
	3	By reviewing the report, it was found that the value of Calcium at W-l groundwater sample was found to be above acceptable limit but within permissible limits which may result in encrustation, the plant may take some preventive measures accordingly.	Regular monitoring of groundwater quality, particularly calcium concentration, will be conducted once a month through NABL accredited laboratory to monitor Calcium Level. Periodic maintenance and descaling of pipelines, storage systems, and water-handling equipment will be done.	
	4	The maximum value pf alkalinity at W-13 groundwater sample falls above the 'acceptable limit' as per Indian Drinking Water Standards 10500:2012. It is recommended to suggest some preliminary treatment measures for ensuring operational efficiency of the plant.	Mirzapur TPP will initiate a routine water quality monitoring program, with monthly sampling and analysis of alkalinity and associated parameters through NABL accredited laboratory and corrective/preventive actions will be taken based on findings in the report. In addition to above, Mirzapur TPP shall be using Surface water and ZLD will be Implemented	
Impact study on biodiversity and aquatic ecology	Recommendations of study report: • **Wildlife Protection**: Launch anti-poaching and forest protection measures; set up wildlife camps with communication tools • **Habitat Restoration**: Implement soil and moisture conservation, afforestation with native species, and green belt development • **Species Conservation**: Develop targeted plans for Schedule-I species like Felis chaus, Hyaena hyaena, Melursus ursinus, and others found in the buffer zone • **Community Engagement**: Promote eco-clubs, green brigades, and alternative livelihoods to reduce forest dependence • **Budget Allocation**: ₹148.02 Lakhs over 5 years for habitat management, fire control, awareness, and capacity building			Indian Institute of Social Welfare and Business Management, University of Calcutta in 2025**.**
Risk assessment study	Project specific risk assessment with respect to storage of LDO, furnace oil & coal storage and other hazardous chemicals is included in Final EIA-EMP Report. The appropriate preventive measures and necessary safeguards such as toxic and flammable gas detectors, alarm / interlock systems, breathing apparatus for working personnel, fire protection systems such as fire extinguishers, water curtain, fire water hydrants in place, the untoward consequences and the major risk due to the same could be eradicated.			Gaurang Environmental Solutions Pvt Ltd.

Period	October' 2024 to December 2024	Additional study (if any)
Marine Impact Assessment Study	Not Applicable	--

28.4.12: The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal	Remarks
1	Municipal Solid Waste	Plant Canteen	70.08 TPA	Collected; segregated using color coded waste bin, Organic waste converters (OWC)	Inorganic will be disposed via local municipal authorized vendor & Organic/Biodegradable waste by OWC.	-
2	E-waste	IT & Telecom Equipment	~2.0 TPA	Collected; segregated	Registered Recycler vendor	
3	Battery waste from UPS	Automotive & Industrial	~3 TPA	Collected; segregated	Authorized Vendor	
4	Bio medical waste	First aid center	0.02 TPA	Collected; segregated	Authorized vendor	
5	Hazardous Waste	Plant Operation	Used/ Spent Oil – 60 TPA, Waste or residues Empty Barrels/ Containers/ Contaminated Liners – 12 TPA containing oil – 10.0 TPA		Registered Recyclers/Pre-processors with SPCB & Authorized Recyclers	

28.4.13: Public Consultation:

The public hearing was conducted on 11.04.2025 at Near Upper Primary School, Madihaan Market, Madihaan Tehsil and District Mirzapur (U.P).

Details of advertisement given	1. The Indian Express dated 07.03.2025 2. Amar Ujala dated 07.03.2025
Date of public consultation	Date: 11.04.2025, Thursday, 11:00 AM onwards
Venue	Near Upper Primary School, Madihaan Market, Madihaan Tehsil and District Mirzapur.

Presiding Officer	1. Sri S.P Shukla, Additional District Magistrate, Mirzapur 2. Sri R.K Singh, Regional Officer, U P. Pollution Control Board, Sonbhadra
Major issues raised	During the public hearing, stakeholders 100% supported the project, recognizing its potential to catalyze regional development. Key suggestions included giving priority in employment to local residents, supporting educational infrastructure (including smart classrooms), and addressing drinking water concerns through borewell installations. The public also appreciated the company's initiatives in community health, sports, and infrastructure, and requested their continuation.
No. of people attended	• About 1600 People were present • 14 No. Verbal representation • 50 No. Written Representation/ Responses received from local people/villagers 2 No. Written Representations received through UPPCB Office after the Public Hearing

As per the Public hearing minutes, about 1600 nos. of people attended the public hearing and about 720 people signed the attendance register.

Summary of needs highlighted during the public consultation:

Category	Key Concerns Raised	Responses Provided
Local Development	During the public hearing, the public was in full support for the proposed Project	We have assured the public that 'development will be done in the project area on priority basis through CER/CSR activities
Employment	Employment Opportunity	The company is committed to providing preference to locals based on their educational qualification and experience. MTEUPPL through Adani foundation proposes to focus on development of the project area in the following areas under the Socio-EMP (CER) initiative. Education Community Health & Sustainability Livelihood Development.

Action plan as per MoEF&CC O.M. dated 30/09/2020 to address the concerns of public consultation:

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
A	**Educational Initiatives**						
	Modernization, Repair & construction/maintenance of identified **Primary / Higher Secondary School of nearby villages** of the project site in consultation with Local Government/School Authorities in villages Dadri Khurd & Madihan.	0.5	0.75	0.75	0.75	0.75	3.50

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	**26-27**	**27-28**	**28-29**	**29-30**	
	Distribution of drinking water filters/Drinking water coolers in schools in nearby villages.	0.35	0.35	0.35	0.35	0.35	1.75
	Basic teaching and learning infrastructure support to Govt. Schools, Supporting in creation of assembly halls, prayer halls, classrooms and smart class, computer room, space for mid-day meals, playground, school boundary walls etc. for government schools in villages Kotwa Pandey,Sukhnai, Devari Kalan.	0.5	0.75	0.75	0.75	0.75	3.50
	Providing scholarships to meritorious students	0.23	0.23	0.23	0.23	0.23	1.15
	Online courses for students in emerging technologies such as Artificial Intelligence, Electric Vehicles, Renewable Energy etc. to equip students with job-ready skills through Adani Skill Development Centre (ASDC).	0.25	0.25	0.25	0.25	0.25	1.25
	Sub Total	**1.6**	**2.35**	**2.6**	**2.6**	**2.6**	**11.75**
B	**Community Health Initiatives**						
	Providing assistance for the construction & operation of Primary Health Centre equipped with necessary facilities and other health centers in Village Patewar & other nearby villages of MTEUPPL in consultation with local government authorities.	0.50	0.75	0.95	1.00	1.00	4.20
	Rural Medical Camps through Medical Team of Primary Health Centre , Safe Menstrual Hygiene Management Awareness, Mega Health Camp, Cataract Screening & Operation in nearby villages of MTEUPPL.	0.40	0.80	0.80	0.5	0.5	3.00
	Promotion of awareness of malnutrition and anemia, Safe Menstrual Hygiene Management Awareness, Mega Health Camp, Cataract Screening & Operation in Madihan and nearby villages. Sanitary napkin vending & disposal machine, provision of Girls'	0.12	0.12	0.12	0.62	0.62	1.60

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	**26-27**	**27-28**	**28-29**	**29-30**	
	Toilets with regular water supply facilities.						
	Promotion of Poshan Vatika at backyard of villagers & Project Suposhan.	0.34	0.34	0.34	0.34	0.34	1.70
	Sub Total	**1.36**	**2.01**	**2.21**	**2.46**	**2.46**	**10.50**
C	**Sustainable Livelihood and Women Empowerment**						
	Skill Development Centre (SDC) to make the youth for achieving their Goals in life by becoming Skilled Professionals.	0.40	0.80	0.80	0.90	0.90	3.80
	Development & Support for Drip irrigation, assistance for mushroom, vegetable cultivation and livestock management in core zone villages.	0.37	0.37	0.37	0.37	0.37	1.85
	Sub Total	**0.77**	**1.17**	**1.17**	**1.27**	**1.27**	**5.65**
D	**Community Infrastructure Development**						
	Repairing, strengthening & Maintenance of Existing Roads in consultation with Gram Panchayats.	0.50	1.50	1.50	1.75	0.50	5.75
	To provide facility for potable drinking water, and water supply system through overhead tanks	0.20	0.20	0.20	0.20	0.20	1.00
	Creation of clean and hygienic environment by proper drainage systems, community sanitation campaign, waste management awareness etc. implementation of Swachchh Bharat Initiative.	0.30	0.30	0.40	0.40	0.35	1.75
	Upgradation & Renovation of sanitation facilities such as toilets in schools with priority for girls.	0.70	0.70	0.70	0.70	0.70	3.50
	Provision of solar street lighting/panels in nearby schools, local health centers of nearby villages, green nurturing programs, plantation drives etc.	0.51	0.51	0.51	0.51	0.51	2.55
	Sub Total	**2.21**	**3.21**	**3.31**	**3.56**	**2.26**	**14.55**
E	**Sports & Culture Development**						
	Promotion of sports for youths and women	0.25	0.25	0.25	0.25	0.25	1.25
	Cultural activities for villagers	0.16	0.16	0.16	0.16	0.16	0.80

Sr. No	Physical activity and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
	Sub Total	**0.41**	**0.41**	**0.41**	**0.41**	**0.41**	**2.05**
F	Tree plantation in Govt. School and Community Health Centre in Villages Garhwa, Ukhdanda & Darhi Ram	**0.20**	**0.60**	**0.40**	**0.40**	**0.40**	**2.00**
	Sub Total						
Total Budget		**6.55**	**9.75**	**10.1**	**10.7**	**9.4**	**46.50**

28.4.14: The capital cost of the proposed project is Rs. 18300 Crores and the capital cost for environmental protection measures is proposed as Rs.3012.39 Crores (Excluding cost towards addressal of Public Consultation issues). The annual recurring cost towards the environmental protection measures is proposed as Rs.32.12 Crores (Excluding cost towards addressal of Public Consultation issues). The employment generation from the proposed project (Operational Phase) is Permanent: 250, Contractual: 2600. The details of cost for environmental protection measures as follows:

S. No.	Item Description	EMP Cost (Rs. in Crores)	Recurring Cost (Rs. in Crores)
1	Air Pollution Control	2459.04	24.59
2	Noise Control	3.54	0.224
3	Water Pollution Control (Including RWH +Solar)	261.3	0.06
4	Ash Management	254.88	5.0
5	Environmental Monitoring & Management	21.83	0.25
6	Green Belt Development	11.80	2.0
7	Addressal of Public Consultation issues	46.5	4.65
	Total	**3058.89**	**36.77**

28.4.15: The proposed Greenbelt will be developed in 121.13 ha area which is about ~33.16 % of the total project area of 365.19 ha with total sapling of 302825 nos. A 10m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total number of 302825 saplings will be planted and nurtured in 121.13 ha in 5 years. The Capital Budget of 11.8 Crores and recurring budget is 2.0 Crores is earmarked for Greenbelt development.

28.4.16: Ash management

Details	Annual generation (MTPA)	Utilization (MTPA)	% of utilization	Balance quantity (MTPA)	No. of storage silos with capacity
Ash (Fly & Bottom)	**2.56**	2.56	100	0	6 x 2500MT

Ash Pond details: -

S.No.	Details of Ash Pond	Ash pond
1.	Area (Ha)	49.37 Ha

2.	Dyke height (m)	15
3.	Volume (m^3)	74 Lac m^3
4.	Quantity of ash to be disposed (Metric Tons)	88.8 Lac MT
5.	Expected life of ash pond (number of years and months)	Capacity/life of ash dyke calculated for 20 years
6.	Type lining carried in ash pond: HDPE lining of LDPE lining or clay lining or No lining	HDPE
7.	Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD)	HCSD / MCSD
8.	Ratio of ash: water in slurry mix (1:_____):	65 :35
9.	Ash water recycling system (AWRS): Yes or No	Yes
10.	Quantity of wastewater from ash pond to be discharged into land or water body (m^3)	0
11.	Details regarding dyke stability study and name of the organization who conducted the study:	N.A

TPP has proposed 100% Ash Utilization. However, approx. 5% may be diverted to the ash dyke in emergencies such as during rains or low demand—as a contingency measure, Life of ash dyke is calculated 20 Years**.**

Ash utilization plan –

S.No.	Activity (as applicable)	Quantity	Percentage
i.	Fly ash based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	0.05	2%
ii.	Cement manufacturing	2.05MTPA	80%
iii.	Construction of roads, road and fly over embankment	0.46 MTPA	18%
	Total	2.56 MTPA	100 %

28.4.17: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration is furnished as below:

A. **Summary of court cases :** Details of Cases pertaining to Environment & Forest are as below:

Sl. No.	Case no.	Name of The Court	Brief Summary of the Case	Last Date of Hearing	Next Date of Hearing	Action taken by PP
1	29/2024 In appeal no-79/2014	National Green Tribunal	In December' 2016, NGT judgement set aside the EC of the 1320 MW TPP at Mirzapur and vide their judgment in May'2017, that Project proponent is at liberty to approach the MoEFCC or any other competent authority for processing of the	**14.07.2016**	**Disposed Off**	The Suggestions in the Order as well MoEFCC, we have taken all the adequate measures to comply.

Sl. No.	Case no.	Name of The Court	Brief Summary of the Case	Last Date of Hearing	Next Date of Hearing	Action taken by PP
			applications for grant of EC upon making up for rectifying the defects and deficiencies pointed out in the judgment. However, the authorities concerned are at liberty to process the same in accordance with law while strictly adhering to the content of the judgment.			
2	883/2024	National Green Tribunal	Hon'ble National Green Tribunal has taken suo motu cognizance of the news item "Experts flag large-scale clearing of vegetation in Mirzapur forest" published in Hindustan Times on 03.07.2024 and has registered Original Application No. 883/2024 and started hearing. Hon'ble NGT has made "Mirzapur Thermal Energy (U.P.) Private Limited" as Respondent No. 5 by order dated 25/10/2024.	**21.07.2025**	The next date of hearing: 18.08.2025	Forest proposal is already submitted vide proposal no. FP/UP/THE/14236/2015 The Proposed Forest Diversion 8.3581 Ha is Outside the Project boundary, which includes water pipeline (5.8162 Ha) and approach road (2.5419 Ha). Stage-I clearance is awaited.
3	Execution Application no-29/2024 In appeal no-79/2014	National Green Tribunal	According to the appellant, by NGT order dated 21/12/2016 in Appeal No. 79/2014, the Environmental Clearance (EC) dated 21.08.2014 granted to the proposed Thermal Power Plant of Welspun Energy Private Limited was	**21.07.2025**	The next date of hearing: 18.08.2025	We have complied with all the stipulated conditions in TOR, Court Order as well EIA Notification 2006 & subsequent amendments, the following studies, NOCs/Certificates have been prepared & obtained. -Hydrogeology,

Sl. No.	Case no.	Name of The Court	Brief Summary of the Case	Last Date of Hearing	Next Date of Hearing	Action taken by PP
			cancelled, and the Tribunal passed an order restraining respondent No. 4, M/s Welspun Energy (UP) Private Limited, from carrying out any development work at the project site and to restore the area to its original condition. Mirzapur Energy (UP) Private Limited was carrying out illegal construction activities at the site by clearing vegetation and forest and levelling the land using large-scale earthwork. An application for ex-parte interim order has been filed by the appellant. Next Listing date fixed on 12.08.2025			Rainwater harvesting & Water Shed Management Plan. -Land use & Land Cover Study. -Action Plan for Greenbelt /plantation & Solar Power hasnessing. -Biodiversity (Ecological) Assessment Study & Wildlife Conservation Plan. -Need Based Assessment, Community Development /CSR Plan & Socio Impact Assessment Study -Water Source Sustainability Study. -Prepared list of nearby sensitive receptors viz; Forest, water bodies, Habitation, Schools, Health centers, Temples has been incorporated in EIA & EMP report, same will be implemented as recommended in study reports. -Public Hearing was conducted on 11.04.2025 as per the EIA notification. The action plan is prepared on the basis of PH proceedings and incorporated in the EIA report.

Compliance to the observation of Hon'ble NGT made in the Judgement dated 21/12/2026:

Sl. No.	Key Issues Addressed in the Judgment dated 21.12.2016	Compliance Status for 2x800 MW De-novo Application for Environment Clearance

Sl. No.	Key Issues Addressed in the Judgment dated 21.12.2016	Compliance Status for 2x800 MW De-novo Application for Environment Clearance
1.	**Change in Project Location and Manipulation of Form-I:** o Originally proposed in Ghazipur, the location was shifted to Mirzapur. o Discrepancies in submission of Form-I (the foundational document for environmental appraisal). o Allegation that the Terms of Reference (ToR) were granted without proper or revised Form-I, undermining the EIA process. o Inconsistencies and procedural lapses in submission and verification of land use data.	A new reference for Environment Clearance for 1600 (2x800) MW is made through ***De-novo.*** Terms of Reference (ToR) is issued by the MoEFCC vide File No: J-13012/12/2011-IA. II (T) dated 29.07.2024. The Project location is at Village Dadri Khurd, Tehsil Mirzapur Sadar, District Mirzapur, Uttar Pradesh. The location of the Project is in accordance with the ToR granted.
2.	**Land Use Misrepresentation:** o The project site was misrepresented as barren land in Form-I and EIA report. o Records, including revenue documents and WAPCOS reports, show the land was fallow/agricultural/grazing and partially forested, not barren. o Misrepresentation influenced siting approval and violated siting criteria set by MoEF&CC.	**The Total Project area is 365.19 Ha.** - **Private Land: 333.81 Ha** - **Govt. Land: 31.38 Ha** The Status of land as industrial land (Power Project) as per the revenue records of Uttar Pradesh. The land is already in possession with Mirzapur Thermal Energy (UP) Private Limited except 31.38 Ha Govt Land. (31.38 Ha land transfer and mutation is under progress at Revenue Dept, Vindhyachal Division, District Mirzapur Order No. 19957/2022 dated; 10.10.2024). The Power Project is acquired along with land and infrastructure from Welspun Group in August'2019. Forest land Outside the Project boundary is 8.3581 Ha which includes water pipeline (5.8162 Ha) and approach road (2.5419 Ha). Forest proposal is under progress vide proposal no. FP/UP/THE/14236/2015 which is already disclosed with ToR Application.
3.	Forest land and Wildlife o Allegation of concealment of forest land within project and ancillary components (rail lines, pipeline, road). o Project area surrounded by several Reserved Forests; involvement of forest land not declared in Form-I or EIA. o Wildlife presence, including Schedule I species (e.g., Sloth Bear, Chinkara), was not properly assessed in the EIA. o No proper biodiversity study conducted before EIA finalization; assessment conducted later, post-	**Forest Land:** - No forest land is involved within Project /Plant Area. NOC regarding non-involvement of forest land has been issued by Forest Office Mirzapur vide letter no. 4229/Mirzapur/15 dated 30.05.2025. - However, Forest land Outside the Project boundary is 8.3581 Ha which includes water pipeline (5.8162 Ha) and approach road (2.5419 Ha). Forest proposal is under progress vide proposal no. FP/UP/THE/14236/2015. - The List of Reserved Forest/ Protected Forest within the study

<table>
<tr><th>Sl. No.</th><th>Key Issues Addressed in the Judgment dated 21.12.2016</th><th>Compliance Status for 2x800 MW De-novo Application for Environment Clearance</th></tr>
<tr><td></td><td>public hearing.</td><td>area is as below:
<table><tr><th>S. No.</th><th>Particulars</th><th>Distance (km)</th><th>Direction</th></tr><tr><td colspan="4">RF/PF</td></tr><tr><td>1</td><td>Mirzapur RF</td><td>Adjoining</td><td>SE</td></tr><tr><td>2</td><td>Danti RF</td><td>Adjoining</td><td>N</td></tr><tr><td>3</td><td>R.F. (Lodhpur)</td><td>4.0</td><td>NE</td></tr><tr><td>4</td><td>Patehra RF</td><td>5.6</td><td>SW</td></tr><tr><td>5</td><td>Sarson R.F.</td><td>5.6</td><td>SE</td></tr><tr><td>6</td><td>Dhanuhaw Pahar</td><td>5.8</td><td>ESE</td></tr><tr><td>7</td><td>Chacdlewakhurd R.F.</td><td>6.8</td><td>NE</td></tr><tr><td>8</td><td>Danti R.F.</td><td>6.9</td><td>NW</td></tr><tr><td>9</td><td>Karaunda R.F.</td><td>6.9</td><td>WSW</td></tr><tr><td>10</td><td>Malua R.F.</td><td>7.5</td><td>SW</td></tr><tr><td>11</td><td>Purainiyan R.F.</td><td>7.0</td><td>SE</td></tr><tr><td>12</td><td>Golhanpur R.F.</td><td>7.0</td><td>E</td></tr><tr><td>13</td><td>R.F. (Atraura)</td><td>8.1</td><td>N</td></tr><tr><td>14</td><td>Matihani R.F.</td><td>9.0</td><td>ESE</td></tr><tr><td>15</td><td>Patehar R.F.</td><td>9.2</td><td>WSW</td></tr><tr><td>16</td><td>Barkachhar R.F.</td><td>9.8</td><td>NW</td></tr></table>Wildlife:
- The proposed project will not affect any Wildlife corridor. Letter in this regard obtained from DFO Mirzapur Vide letter no. 4227/Mirzapur/15 dated 30.05.2025.
- List of Schedule-1 species found in study area (22 nos.) has been provided by DFO Mirzapur vide letter no. 4226/Mirzapur/15 dated 30.05.2025.
- A detailed study on Biodiversity (Ecological) Assessment and Wildlife Conservation Plan has been conducted by Dept. of Environment, Indian Institute of Social Welfare and Business Management, University of Calcutta.</td></tr>
<tr><td>4.</td><td>Deficiencies in Public Consultation Process:
o Inadequate publicity and restricted public participation in the public hearing.
o Allegations of political and police influence, intimidation, and non-availability of EIA documents electronically.
o Non-consideration of objections and</td><td>The Public Hearing for the project is duly conducted by the Regional office, Uttar Pradesh Pollution Control Board (UPPCB), Sonbhadra & Mirzapur as per the EIA Notification 2006 and subsequent amendments on 11.04.2025 at near Upper Primary School, Madihan Market, Madihan Tehsil, Mirzapur.
The advertisements/notice regarding the Public Hearing were published in one National and Regional publications,
1. The Indian Express, Lucknow Edition</td></tr>
</table>

Sl. No.	Key Issues Addressed in the Judgment dated 21.12.2016	Compliance Status for 2x800 MW De-novo Application for Environment Clearance
	representations submitted by affected persons including Banaras Hindu University.	dated 07.03.2025 2. Amar Ujala, Varanasi, Mirzapur Edition dated 07.03.2025 A copy of Draft EIA-EMP report with executive summary in English & Hindi was made available at the following offices: - MoEFCC, IRO Office Lucknow. - UPPCB, HO, Lucknow - UPPCB, RO - District Collectorate, Mirzapur - District Industries Centre, Mirzapur. - District Panchayat Office, Mirzapur. - Janpad Panchayat, Mirzapur. - Gram Panchayat, Dadhiram. Proper Announcement/ Munadi was conducted in nearby villages prior to Public Hearing (10.04.2025). The Action plan has been duly prepared to address the needs highlighted by the Public during the Public Hearing. A budget of Rs. 46.50 crore is earmarked for Socio EMP (CER) activities.
5.	Violation of Siting Criteria & MoEF Guidelines: o Ignored criteria: distance from forests, habitations, water bodies, and ecological sensitivity zones. o Guidelines require forest and prime agricultural land to be avoided for power plants.	The EIA Report has been prepared considering all sensitive features/ receptors within the study area and mitigation measures have been included in the Additional Study reports and budget allocation has been kept in EMP. The land was already provided by the local administration for setting up Thermal Power Plant in 2012.
6.	Environmental and Ecological Impacts Ignored: o No proper assessment of water drawal impact on Upper Khajuri Reservoir, used for drinking, irrigation, and wildlife. o Impacts of coal transportation, ash disposal, and construction on ecology and human health not assessed.	Water Drawl from Upper Khajuri Dam: A detailed study on Water Source Sustainability is conducted and prepared by Dept. of Environment, Indian Institute of Social Welfare and Business Management, University of Calcutta. The conclusion of the study report is reproduced as under: *"In view of the total water requirement of 28 MCM/year for proposed thermal power plant unit and for the sustainability of the water source in the coming future, took on the study of Upper Khajuri dam water levels and water availability in the Upper Khajuri dam at the tapping point for the past 10 years for all the possible scenarios such as scanty rainfall months and lowest reservoir levels. Water availability in the Upper Khajuri dam has also been confirmed by the data provided by UPWRD, Mirzapur District and along with this efficacy and efficiency of the existing intake*

Sl. No.	Key Issues Addressed in the Judgment dated 21.12.2016	Compliance Status for 2x800 MW De-novo Application for Environment Clearance
		structure, pump house details and the pipeline used to deliver the raw water from the intake structure to the plant have also been studied by IISWBM. From all these studies and analysis of data via graphs and official government sources, it is found that water storage in the Upper Khajuri dam is always present in adequate amount and the level in the dam at the tapping point has always been above the dead storage level. Therefore, we can say that an adequate amount of raw water is available in the Upper Khajuri dam for all the possible scenarios. Moreover, the raw water can be easily pumped in the near future as per the provisions of adding pumps in accordance with the requirements of the intake structure as discussed above. Impact due to water withdrawal is also nil as even after maximum utilization of water from the Upper Khajuri dam by different sectors, the government of Uttar Pradesh will be still left with 2.44 MCM of water per year as a whole and 95.885 MCM of water per year if we go months as shown in Table 9.3 which can also be utilized for downstream ecology sustainability. ***Looking at the overall project scenario, it has been noticed that the project in totality considered environmentally safe."*** • Transportation of Coal will be through Rail with the guidelines of Coal India Limited. • Efforts will be made for 100% utilization of ash as per Fly Ash Notification, 31st December'2021 and its amendments. • An MoU has been signed with ACC Cement Limited and Ambuja Cement Limited for utilization of fly ash.
7.	Failure to Conduct Site Visit by EAC: o Though EAC earlier decided to conduct a site inspection, it relied solely on reports by State officials. o Lack of ground verification questions the objectivity of the appraisal process.	A Site visit/ inspection by the IRO office, MoEFCC, Lucknow on dated 25.02.2025 and the Status report along with site photographs were submitted to the MoEFCC vide letter dated 28.02.2025.
8.	Non-fulfillment of Procedural Requirements of EIA Notification, 2006: o Incomplete or non-compliant scoping, improper baseline data, and procedural violations during appraisal. o Tribunal emphasized that any concealment or misleading	The entire procedure in the current proposal has been adhered in full compliance with the EIA Notification, 2006 and its subsequent amendments. No information has been concealed at any stage, and all relevant data has been transparently presented. The EIA-EMP report contains complete details as per statutory requirements.

Sl. No.	Key Issues Addressed in the Judgment dated 21.12.2016	Compliance Status for 2x800 MW De-novo Application for Environment Clearance
	information at any stage-scoping. public consultation, or appraisal-vitiates the EC process.	
9.	Conclusion by the Tribunal o The NGT set aside the Environment Clearance dated 21.04.2014 granted to Welspun Energy (U.P.) Pvt. Ltd. o It directed that the project be appraised de novo, Le., a fresh appraisal following due process. o The judgment re-emphasized strict compliance with environmental safeguards, public participation, and precautionary principles under Section 20 of the NGT Act, 2010.	Complied. Mirzapur TPP has duly addressed all the observations of Hon'ble NGT. The proposal has changed from 2x660 MW to 2x800 MW and EC expired, a new reference (De Novo) has been initiated.

B. Summary of Show Cause Notices – Nil

S. No	Issuing authority	Date	Reasons for the issuance of SCN	Status of reply submission	Present status
1	Not Applicable.				

C. Summary of violation

Any violation case pertaining to the project on following: i. The Environment Protection Act, 1986 ii. Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980. iii. The Wildlife (Protection) Act, 1972	**No.**

28.4.18: Name of the EIA consultant: M/s Gaurang Environmental Solutions Pvt. Ltd. Certificate No. NABET/EIA/2326/RA 0338 Valid up to: 07.12.2026].

28.4.19: Public representations: Ministry is in receipt of public representation from different stakeholders regarding the instant project consideration. The issues stated in the representation and reply of the project proponent is furnished as below:

A) Representation from NGO

Sl. NO	Written representations/Issues	Response from Mirzapur TPP
-	In June 2024, the present proponent applied for a fresh EC. However, without awaiting its grant, they commenced large-scale illegal construction at the site. These activities included clearing and removing vegetation from forest land, extensive earthwork, land levelling, erection of boundary walls, construction of rooms, electric poles, etc. and construction of an unauthorised approach road through	**The contents of Para are not factual**. No construction activity has been undertaken at site in violation of EIA Notification. No project related activity has been undertaken at the project site except the activity as per MoEF&CC OM dated 29.03.2022. We hereby clarify that a temporary boundary wall was already constructed by previous company during the validity period of Environmental Clearance (EC) and Consent to

Sl. NO	Written representations/Issues	Response from Mirzapur TPP
	reserved forests. The project presently holds no valid EC, Forest Clearance. The Consent to Establish/Operate is also not valid given the change in project capacity from 1320 MW to 1600 MW.	Establish (CTE). No Construction activity related to Thermal power plant has been undertaken till date. Temporary repairing, painting and maintenance of existing plant boundary using precast wall segments and installed temporary GI sheets in certain areas solely to prevent encroachment on project land has been done.
1.	The MOEFCC And EAC Cannot Grant 'Ex-Post Facto' Environmental Clearance to This Project.	The contents of the para are not applicable, since no activity in violation of EIA notification has been undertaken.
A	Complaint to MoEFCC (28 June 2024) 1. A *suo motu* case initiated by the NGT's Principal Bench based on a news article in *Hindustan Times* dated 03.07.2024. [OA 883 of 2024] 2. A contempt petition filed by the original petitioner in relation to the NGT's judgment dated 21 December 2016. [EA 29 of 2024]	NGT hearing held on 18.08.2025, and Judgement order is awaited.
B	UPPCB Site Inspection Report (25 November 2025) The Uttar Pradesh Pollution Control Board (UPPCB) inspection recorded: *"During field visit at above concerned site, construction of pre-cast boundary wall and levelling work of ground was found under progress".* The UPPCB subsequently issued a notice to the proponent for carrying out establishment work without a valid Consent to Establish (CTE) on 30th November 2025.	The response to the same has already been submitted to UPPCB vide letter dated 25.02.2025. The content of the letter has already been detailed as above.
C	Continued construction Despite Pending NGT cases.	As already clarified, no construction activities have been undertaken except for those permitted in MoEFCC Notification dated 29.03.2022. NGT hearing held on 18.08.2025, and Judgement order is awaited.
D	MoEFCC Regional Office Inspection Report (25 February 2025):- a) Boundary wall has been constructed all around the project using precast boundary pillars/walls and by using MS profile sheets (in undulated patches), 7 to 10 feet in height. b) Main gate installed using MS pipe/rods c) One security room constructed close to the main gate d) One abandoned well found during the inspection e) A rainwater storage pond with 30,000	We hereby clarify that a temporary boundary wall was already constructed by previous company during the validity period of Environmental Clearance (EC) and Consent to Establish (CTE). No Construction activity related to Thermal power plant has been undertaken till date. Temporary repairing, painting and maintenance of existing plant boundary using precast wall segments and installed temporary GI sheets in certain areas solely to prevent encroachment on project land has been done.

Sl. NO	Written representations/Issues	Response from Mirzapur TPP
	m³ (equal to 3 Crore Liters) capacity has been constructed in the southwest direction of the site f) Several MS portable site cabins fitted with Split Air Conditioners g) One MS portable toilet available on site. h) Availability of industrial cables with wooden/plastic drums, and other materials i) Digging work for cable laying observed in some patches j) Readymade electricity poles with wires seen in working condition and leading to a nearby village. k) High tension wires also passed through project land.	The project was acquired from Welspun Group in August 2019 with Land along with available infrastructure. There are few existing transmission lines passing through the project site, which have already been shown in the layout plan.
2. Violation Of Van Adhiniyam 1980 By the Project Proponent		
A	Involvement of forest inside and outside of Project Site. If the proposed project is established at this location, all major ancillary components — including the railway line for coal transportation, water pipeline, transmission lines, and approach road — would necessarily pass through forest land. This would require the project proponent to obtain Forest Clearance (FC) for each component before grant of EC and commencing any construction. This material fact was deliberately concealed when applying for fresh EC in 2024, with the clear intention of evading FC under the Van Adhiniyam 1980 and creating a *fait accompli*.	8.3581 Ha. of forest land (**Outside the project area**) is proposed for laying of water pipeline (5.8162 Ha.) and for approach road (2.5419 Ha.) for which forest clearance application was submitted vide proposal number FP/UP/THE/14236/2015, which is already under progress and stage I clearance is awaited. The same was submitted to MoEFCC in all the proposals and the same has also been stipulated in ToR letter issued by MoEFCC vide letter dated 29.07.2024.
	The land earmarked for the main thermal power plant lies within the Marihan Forest Range of the Mirzapur Forest Division, forming part of a contiguous forest landscape and a proposed Sloth Bear Conservation Reserve.	No forest land is involved within the project/ plant site. There is no notification published for the proposed project area on Sloth Bear Conservation Reserve. We will adhere to all the Notifications/ Recommendation from the MoEFCC/ State Forest/SPCB. The boundary wall of TPP has already been constructed and all mitigations measures are proposed to be implemented for prevention of Impact on Ecology.
	The Survey of India toposheet submitted by the proponent as part of the EC application — available on the Parivesh portal also clearly indicates forested areas within the site.	No forest land is involved within the project/ plant area. NOC regarding non-involvement of forest land has been issued by Forest office, Mirzapur vide letter no.- 4229/Mirzapur/15 dated 30.05.2025 as well Khasra details of the Project area has also been verified through revenue department (Tehsildar).

Sl. NO	Written representations/Issues	Response from Mirzapur TPP
B	Violation Of Van Adhiniyam 1980 as observed by the Undersigned and MoEFCC Regional Office:- I. Illegal Use of Forest Road for Heavy Vehicle Transport and Encroachment on Forest Land. II. Suppression of FC Requirement for Railway Corridor and Transmission Line. III. Doubtful Conduct of Range Officer and Divisional Forest Officer, Mirzapur.	The Road is not in use by the Project proponent except regular patrolling/daily commute for site security purpose. 8.3581 Ha. of forest land (**Outside the project area**) for water pipeline (5.8162 Ha.) and approach road (2.5419 Ha.) application was submitted vide proposal number FP/UP/THE/14236/2015, which is already under progress and stage I clearance is awaited.
3	**EIA Report Not Available in Public Domain, Inadequate Public Consultation** A. **Non-Availability of EIA Report.**	Public hearing was conducted by UPPCB as per provision of EIA notification 2006 and its subsequent amendments. Copy of Draft EIA report along with executive summary in English & Hindi was submitted to following: - 1. MoEFCC, IRO Office Lucknow. 2. Member Secretary, UPPCB 3. Regional Office, UPPCB 4. Gram Panchayat, Dadhiram. 5. District Industries Centre, Mirzapur. 6. District Panchayat Office, Mirzapur. 7. DM, Mirzapur. 8. Janpad Panchayat, Mirzapur. Newspaper advertisement was published by UPPCB in Major Daily Viz. The Indian Express and Amar Ujala on 07.03.2025. Public announcement (Munaadi) was also done in nearby villages to apprise the public for the public hearing.
	Draft EIA Report has not been made available on the MoEFCC website or the Parivesh Portal. The same was not there even prior to the Public Hearing, despite a formal representation being submitted on the day of the hearing. The Final EIA Report was accessible on the Parivesh Portal only after the undersigned filed an RTI application with MoEFCC on 31 July 2025, upon discovering that the project was scheduled for consideration for grant of EC by the EAC on 12 August 2025.	We have complied with all the directions by UPPCB and local administration. There is no provision of uploading Draft EIA report on the MoEFCC website or the Parivesh Portal as per the Appendix IV Para 2.3 and 2.4 of EIA notification. All the due procedure as laid in the EIA notification, Appendix IV has been adhered to by UPPCB. The final EIA was uploaded online on PARIVESH Portal which is accessible.
	B. Irregularities in Public Hearing	Public hearing was conducted by UPPCB as per provision of EIA notification 2006 and its subsequent amendments. Copy of Draft EIA report along with executive summary in English & Hindi was submitted to following: - 1. MoEFCC, IRO Office Lucknow. 2. Member Secretary, UPPCB 3. Regional Office, UPPCB 4. Gram Panchayat, Dadhiram. 5. District Industries Centre, Mirzapur.

Sl. NO	Written representations/Issues	Response from Mirzapur TPP
		6. District Panchayat Office, Mirzapur. 7. DM, Mirzapur. 8. Janpad Panchayat, Mirzapur. Newspaper advertisement was published by UPPCB in Major daily viz. The Indian Express and Amar Ujala on 07.03.2025. Public announcement (Munaadi) was also done in nearby villages to apprise the public for the public hearing.
	The Public Hearing was conducted in the compound of a school in *Marihan*, far from the proposed site in village Dadri Khurd. The two locations fall in different assembly constituencies—Marihan and Majhawan, respectively	The Public Hearing venue was decided by DM, Mirzapur and UPPCB, RO Sonbhadra keeping in view the most suitable/approachable and accessible location for public. The venue is about 4.3 km from project site and the location of well informed by the means of Newspaper advertisement and public announcements done before public hearing date (more than 30 days). The public hearing was conducted by ADM and RO, UPPCB in line with the provisions of EIA Notification, 2006 and subsequent amendments.
4	Alternate Project Site Shall Be Explored Due To Significant Presence of Forests and Wildlife.	The proposal has changed from 2x660 MW to 2x800 MW and EC expired, a new reference *(De Novo)* is being made through this application for grant of EC.
5	Discrepancies On the Parivesh Portal, Affecting Transparency and Accessibility Of Critical Environmental Information:- A. Two parallel proposal numbers creating confusion. B. Inconsistencies with date of uploads.	Proposal No. IA/UP/THE/467671/2024 for obtaining ToR (Granted) and Proposal No. IA/UP/THE/542333/2025 is for EC application. All requisite documents were uploaded in respect of application.

B) Representations

Sl.No.	Written representations	Point-wise Clarification/ Reply
1.	**E-mail received on 11.04.2025**	
	1. Lack of information: The affected villagers were not given any prior information. Village Dadri Khurd and the surrounding villages fall in the forest and hilly area under Mirzapur Forest Division. Newspapers do not reach here and neither did anyone make any effort to give us any information at the village level.	Public hearing was conducted by UPPCB as per provision of EIA notification 2006 and its subsequent amendments. Copy of Draft EIA report along with executive summary in English & Hindi was submitted to following: - 1. MoEFCC, IRO Office Lucknow. 2. Member Secretary, UPPCB 3. Regional Office, UPPCB 4. Gram Panchayat, Dadhiram. 5. District Industries Centre, Mirzapur. 6. District Panchayat Office, Mirzapur. 7. DM, Mirzapur. 8. Janpad Panchayat, Mirzapur. Newspaper advertisement was published by UPPCB in two newspaper publications (National & Vernacular) viz. The Indian Express and Amar

Sl.No.	Written representations	Point-wise Clarification/ Reply
		Ujala on 07.03.2025. Public announcement (Munaadi) was also done in nearby villages to apprise the public for the public hearing.
	2. Public hearing was held far away: This power plant is proposed in village Dadri Khurd which is in Tehsil 'Sadar' and Assembly Constituency 'Majhawan', which have a different MLA. Whereas the public hearing was organised in Tehsil 'Madihan' and Assembly Constituency 'Madihan', which are geographically and administratively different from the project site. The residents of village Dadri Khurd are directly affected by this project and hence it was necessary that this public hearing be organised in village Dadri Khurd or any nearby village so that we villagers could express our views on the environmental impact of this project. But this did not happen.	The Public Hearing venue was decided by DM, Mirzapur and UPPCB, RO Sonbhadra keeping in view the most suitable/approachable and accessible location for public/people. The venue is about 4.3 km from project site and the location was well informed by the means of Newspaper advertisement and public announcements done before public hearing date (more than 30 days). Public Hearing was conducted by UPPCB, RO Sonbhadra in Chairmanship of Additional District Magistrate (ADM) Mirzapur on 11.04.2025 as per the provision of EIA notification 2006 and its subsequent amendments.
	3. Termination in short time: When we got information about the public hearing on the morning of 11 April 2025, we hurriedly reached the public hearing venue at around 12 noon but by the time we reached the public hearing venue, we came to know that the public hearing had been ended in just half an hour and the company and administrative officials had left. But the signature campaign and tea and snacks arrangements were going on there while no person from the company was present there from whom we could get information about the project and tell our problems formally.	The Public Hearing commenced from 11:00 am by ADM & RO, UPPCB and was concluded by ADM and RO, UPPCB after public consensus in line with the provisions of EIA Notification, 2006.
	4. Absence of real affected people and crowd of outsiders: We also found out that the public hearing was led by Madihan MLA Ramashankar Patel who was sitting in the middle of the stage with government officials. Most of the people present at the place where the public hearing was held were outsiders who were brought by Madihan MLA in buses, even though this project site does not fall under his jurisdiction. These people were neither informed about the environmental impact of this project nor were they given any information related to this project, they were called only to mark their presence. At the same time, the people who are actually affected by this project, and live in Dadri Khurd and its nearby villages were not given any information about this public hearing. It is also a matter of investigation that who were the people who gathered	Public Hearing was conducted by UPPCB, RO Sonbhadra in Chairmanship of ADM Mirzapur on 11.04.2025 at Village Marihaan located at about 4.3 km from project site. Newspaper advertisements were published by UPPCB in Major daily viz. The Indian Express and Amar Ujala on 07.03.2025. Public announcement (Munaadi) was also done in nearby villages to apprise the public for the public hearing as per the provision of EIA notification 2006 and its subsequent amendments.

Sl.No.	Written representations	Point-wise Clarification/ Reply
	there that day and for what purpose they were brought there.	
	5. Lack of Draft EIA Report: The Draft EIA report was neither made available on the public portal nor provided on demand. I also tried to lodge a complaint in this regard at the District Officer Mirzapur office, but neither our complaint was heard there nor the application was accepted. I also sent a complaint to Uttar Pradesh Pollution Control Board and other related departments through email, but did not receive any satisfactory reply.	Copy of Draft EIA-EMP report along with executive summary in English & Hindi was made available at the following places: - 1. MoEFCC, IRO Office Lucknow. 2. Member Secretary, UPPCB 3. Regional Office, UPPCB 4. Gram Panchayat, Dadhiram. 5. District Industries Centre, Mirzapur. 6. District Panchayat Office, Mirzapur. 7. DM, Mirzapur. 8. Janpad Panchayat, Mirzapur.
2	**E-mail received on 11.04.2025**	
	1. The Environmental Impact Assessment (Draft EIA) report has not been made public till now, whereas it is mandatory to publish it and make it available for public viewing before the environmental public hearing.	Public hearing was conducted by UPPCB as per provision of EIA notification 2006 and its subsequent amendments. Copy of Draft EIA report along with executive summary in English & Hindi was submitted to following: - 1. MoEFCC, IRO Office Lucknow. 2. Member Secretary, UPPCB 3. Regional Office, UPPCB 4. Gram Panchayat, Dadhiram. 5. District Industries Centre, Mirzapur. 6. District Panchayat Office, Mirzapur. 7. DM, Mirzapur. 8. Janpad Panchayat, Mirzapur. Newspaper advertisement was published by UPPCB in Major Daily viz. The Indian Express and Amar Ujala on 07.03.2025. Public announcement (Munaadi) was also done in nearby villages to apprise the public for the public hearing.
	2. This report was not made available on the Uttar Pradesh Pollution Control Board, Ministry of Forest and Environment or any public portal till 11th April 2025, 11:00 am.	
	3. Neither the information was published in local newspapers, nor was any publicity done at the village level, which raises questions on the transparency of the public hearing process.	
	4. When we went to meet the concerned officials, we were stopped from meeting them. This gives rise to the suspicion that the officials themselves are working against transparency.	
	5. Persons who are directly or indirectly connected with the project were invited as chief guests in the public hearing, thereby affecting impartiality.	
	6. This area is extremely sensitive from the environmental and biodiversity point of view, and the proposed project is likely to have serious effects on the local geo-ecology, water resources, forest land and rural life.	The proposal has changed from 2x660 MW to 2x800 MW and EC expired, a new reference **(*De Novo*)** is being made through this application for grant of EC Proposed project is based on advanced Ultra Super Critical Technology, which is more environment friendly and will be equipped with Highly efficient pollution control equipment's such as Electro-Static Precipitator (ESP), SCR, SOFA Dust Extraction and Suppression systems, STP, ETP etc. TPP shall be based on Zero Liquid Discharge (ZLD). Environment Impact Study along with Biodiversity Assessment study through Indian Institute of Social Welfare and Business

Sl.No.	Written representations	Point-wise Clarification/ Reply
		Management, University of Calcutta. • No forest land is involved in Project /Plant Area. NOC regarding non-involvement of forest land has been issued by Forest Office Mirzapur vide letter no. 4229/Mirzapur/15 dated 30.05.2025. All mitigations measures are proposed to be implemented for prevention of Impact on ecology, water resources, forest land and rural life.
	7. Earlier also, in the case of Welspun Energy Power Project, Mirzapur, violation of environmental rules had come to light, as a result of which the said project was cancelled by the National Green Tribunal (NGT).	As per NGT dispose order, all recommendations have been addressed and complied.
3	Newspaper Cuttings:	
	1. Paper cutting – प्रयागराज, गुरुवार, 17.04.2025 2. अचूक संघर्ष, वाराणसी 18 अप्रैल से 24 अप्रैल 2025 3. राष्ट्रीय हिन्दी दैनिक, रणतूर्य, 16.04.2025 4. Newspaper cutting heading as: (a) अदानी के थर्मल पावर प्लांट का विरोध (b) 1600 मेगावाट थर्मल पावर प्लांट को लेकर विरोध तेज (c) जनसुनवाई को प्रभावित लोगो ने सुनियोजित करार देते हुए जिलाधिकारियों से की शिकायत (d) पर्यावरण संकट: थर्मल पावर प्लांट पर विरोध का साया	The newspaper cuttings referenced in the emails are **not from nationally recognized publications** and therefore lack credibility. Furthermore, the claims made in these cuttings are **entirely baseless and misleading**. We reaffirm that the **public hearing was duly conducted by the Uttar Pradesh Pollution Control Board (UPPCB)** chaired by the **ADM, Mirzapur**, as per the prescribed procedures and guidelines.

The above representations have been deliberated by the EAC along with Sh R K Singh, RO Mirzapur, UPPCB. During the meeting, it was informed by the representative of UPPCB that due process as per the EIA Notification, 2006 has been followed for the public hearing held on 11/04/2025.

28.4.20: Written submissions

The written submission made by the proponent during the meeting is furnished as below:

S.No	Additional Information Sought	Pointwise Reply/ Clarification
1	Compliance Status of the key issues Addressed in the NGT Order dated 21.12.2016.	The Compliance Status of key Issues Addressed in the NGT Order dated 21.12.2016 is furnished at para no. 28.4.17.
2	Point wise response to Written representations received through MoEFCC mail to be submitted.	The point wise response towards Written representations received from MoEFCC by Email is furnished at para no. 28.4.19.
3	Justification regarding categorization of TPP in terms of MoEFCC Notification dated 11/07/2025.	Mirzapur Thermal Power Plant is located about **19 KM** distance from the Mirzapur Town/City (DM office). The nearest

S.No	Additional Information Sought	Pointwise Reply/ Clarification
		CPA/SPA is Varanasi, distance is about **45.46 Km** as per the DSS portal, therefore Mirzapur TPP falls under the **"Category C"** as per MoEFCC Notification dated 11.07.2025.
4	The present status of Stage-I Forest Clearance to be provided.	8.3581 Ha of Forest Land is **Outside the Plant** Boundary for which Forest Proposal Application was filed in 2015 vide proposal no. FP/UP/THE/14236/2015. Stage-l approval is awaited and expected by 30th September 2025.
5	The GLC modelling has to be revisited.	The revised GLC Modelling report is furnished as above.

Observations and deliberation of the EAC

28.4.21: The Committee observed and noted the following:

i. Instant proposal is for seeking Environmental Clearance for setting up of 2x800 MW Coal based Ultra Super Critical Thermal Power Project (TPP) by M/s Mirzapur Thermal Energy (UP) Private Limited (MTEUPPL) located at Village Dadri Khurd, Tehsil, Mirzapur Sardar, District Mirzapur, Uttar Pradesh

ii. The Project Site for instant proposal was earlier accorded EC by MoEF&CC on 21.08.2014 and CTE was obtained from UPPCB. The Hon'ble National Green Tribunal vide its judgement dated 21.12.2016 in the matter Appeal No 79 of 2014 titled as Debadityo Sinha vs. Mirzapur Energy (UP) Pvt. Ltd. & Others quashed the EC dated 21.08.2014 and the project could not be implemented further and the validity of the EC got lapsed. Meanwhile, the project was acquired by Mirzapur Thermal Energy (UP) Private Ltd., a subsidiary of Adani Power Limited (APL) and submitted a fresh proposal for grant of EC by de-novo under the provisions of the EIA Notification, 2006.

iii. The EAC also took into consideration the drone survey of the project site and KML file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH portal.

iv. There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site as ascertained from DSS.

v. The project site is not located within the Critically Polluted Area (CPA) / Severally Polluted Area (SPA) as per CEPI assessment 2018 of CPCB.

vi. As per the categorization of CPCB, the proposed project do not fall within any CPA nor in any non-attainment cities as per MoEF &CC notification G.S.R. 465(E) dated 11/07/2025. Hence, it is classified as Category 'C' project with respect to FGD installation.

vii. ToR was granted vide letter dated 29.07.2024.

viii. Total land of 365.19 ha is required for the project. The land is already in possession

with Mirzapur Thermal Energy (UP) Private Limited except 31.38 Ha Govt Land. For 31.38 Ha land transfer and mutation is under progress at Revenue Dept, Vindhyachal Division, District Mirzapur Order No. 19957/2022 dated 10.10.2024.

ix. In addition to the 365.19 Ha, there is a Forest land Outside the Project boundary is 8.3581 Ha which includes water pipeline (5.8162 Ha) and approach road (2.5419 Ha). Forest proposal is under progress vide proposal no. FP/UP/THE/14236/2015. The said approach road connects the project site with SH-5. Hence, the 8.3581 Ha of forest land is considered as a material component of the project as observed in the judgement dated 21/12/2016 of Hon'ble NGT in Appeal No 79 of 2014. Stage – I FC for 8.3581 ha is yet to be obtained by the project proponent.

x. It was apprised by the Member Secretary that instant proposal involves 8.3581 Ha of forest land for which requisite Stage I FC under the provisions of Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 is yet to be obtained. Further apprised that as per OM dated 09/09/2011, after the EAC has recommended the project for environmental clearance, it would be processed on file for obtaining decision of the Competent Authority for grant of environmental clearance. In the cases where the Competent Authority has approved the grant of environmental clearance, the proponent will be informed of the same and a time limit of 12 months will be given to submit the requisite Stage – I forestry clearance. On receipt of the same, formal EC letter will be issued by the Ministry.

xi. Total 22 Schedule I Species found in the buffer zone during field survey and secondary sources. Wildlife and conservation plan for schedule I species prepared and submitted for approval.

xii. Total fresh water requirement is 76800 KLD. Approval for drawing 98630 KLD of water for all 2 units from River Ganga has been obtained from WRD Uttar Pradesh vide letter dated 09/10/2011. The water will be transported to the plant site through pipeline.

xiii. The power requirement for the proposed project is estimated as 7.5 MW during Construction Phase and will be obtained from nearby UP Electricity Board Sub-station

xiv. 275 m high Chimney (Twin flue) is proposed and proponent will abide by and adhere to all the Notifications/ Directives issued by the MoEFCC from time to time regarding the TPP.

xv. Zero Liquid Discharge system will be adopted.

xvi. Transportation of coal will be done 100% by rail. No road transportation is involved.

xvii. The proposed Greenbelt will be developed in 121.13 ha area which is about ~33.16 % of the total project area of 365.19 ha with total sapling of 302825 nos. A 5m to 50 meter wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total number of 302825 saplings will be planted and nurtured in 121.13 ha in 5 years. The Capital Budget of 11.8 Crores and recurring budget is 2.0 Crores is earmarked for Greenbelt development. The Ash will be collected in dry form in silos for further utilization/transportation through rail wagons / closed trucks to adjacent Cement Plants. 100% Ash will be utilized as per Ash Notification dated 31/12/2021.

xviii. Ash pond is proposed in an area of 49.37 Ha for ash disposal.

xix. Public hearing for the project was held on 11/04/2025. The Committee looked in to the videography of the public hearing proceedings, deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory. The committee advised the PP to implement the PH action plan in a time bound manner.

xx. The capital cost of the proposed project is Rs. 18300 Crores and the capital cost for environmental protection measures is proposed as Rs.3012.39 Crores (Excluding cost towards addressal of Public Consultation issues). The annual recurring cost towards the environmental protection measures is proposed as Rs.32.12 Crores (Excluding cost towards addressal of Public Consultation issues). The employment generation from the proposed project (Operational Phase) is Permanent: 250, Contractual: 2600.

xxi. The Committee deliberated on the baseline data and incremental GLC due to the proposed project. The committee noted that the proponent is providing Electrostatic Precipitator (ESP), Low Nox Burner, SOFA technology and Dust Extraction & Suppression System to control the emission of Particulate matter and NOx and also stack with a height of 275 m will be provided to control & regulate the air emission from the proposed project.

xxii. Committee deliberated on the action plan of Hydrogeology study; Bio-diversity/aquatic ecology study and Risk assessment study and found it satisfactory.

xxiii. The committee noted that with respect to water pollution control, domestic wastewater will be treated in Sewage treatment plant and treated sewage water shall be reused. Effluent will be treated in ETP. There will be no effluent discharge from the premises, hence the ZLD will be maintained. A state-of-the-art roof top rain water harvesting system will be provided to collect the run -off for ground water recharging.

xxiv. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components.

xxv. There are two court cases pending before the Hon'ble NGT and the EAC asked the proponent to comply with the directives of the Hon'ble NGT.

xxvi. The Committee deliberated on the observations of Hon'ble NGT made in the Judgement dated 21/12/2016 in Appeal No 79 of 2014 titled as Debadityo Sinha vs. Mirzapur Energy (UP) Pvt. Ltd. & Others along with the compliance made by the proponent in this regard.

xxvii. The Committee deliberated on the public representations received for the project as well the reply furnished by the proponent.

xxviii. The EAC also deliberated on the written submission of the project proponent and found it satisfactory.

xxix. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

Recommendations of the Committee:

28.4.22: In view of the foregoing and after detailed deliberations, the committee ***recommended*** the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 **subject to uploading of written submission** on PARIVESH Portal and stipulation of the following specific conditions and general conditions based on project specific requirements:

A. Specific conditions

[A] Environmental Management

1) Project proponent shall submit the Stage – I Forest Clearance for diversion of forestland of 8.3581 ha involved in the project for non-forestry activity prior to grant of Environment Clearance.
2) The project proponent shall be abide by all orders and judicial pronouncements, made from time to time by the Hon'ble National Green Tribunal in Original Application No. 883/2024 and Execution Application no-29/2024 in appeal no.79/2014.
3) Project proponent shall ensure that 100% utilization of ash generated from the project in accordance with the ash utilization notification dated 31/12/2021 and its subsequent amendment. Area for the proposed ash dyke shall not exceed 49.7 ha. as committed.
4) Project proponent shall establish 4 Continuous Ambient Air Quality Monitoring Stations (CAAQMS) at suitable locations in and around project site in consultation with UPPCB within one year from the date of grant of EC.
5) Project proponent shall comply with the recommendations made in the biodiversity assessment report and Hydrogeology report in a time bound manner. Compliance status in this regard shall be submitted to the Regional Office of MoEF&CC along with the six monthly compliance report.
6) The water requirement for project is estimated as 76800 KLD and the same shall be met from Ganga River. The specific water consumption for unit 1 & 2 shall be less than 3.0 m^3/MWhr.
7) The entire coal requirement for 2 units of TPP (2x800 MW) shall be transported by rail network only and no road transportation is permitted.
8) Project proponent shall store harvested rainwater in the project boundary and utilize the same for plantation, recharging water in the pond and domestic utilization in colonies. A record shall be maintained of water collected through rainwater and its supply system. PP shall get the water audit done every year to optimize the water requirement.
9) Project proponent shall implement the protective measure proposed in EMP in a time-bound manner. The budget earmarked for the same is Rs. 3012.39 crores and should be kept in separate accounts and audited annually. The implementation status along with the amount spent with documentary proof shall be submitted to the concerned Regional Office for the activities carried out during the previous year.
10) Project proponent shall assess the carbon footprint of the project and develop carbon sink/carbon sequestration resources using modern technologies. The implementation report shall be submitted to the concerned Regional Office of the MoEF&CC.
11) Project proponent shall ensure that diesel operated vehicles will be switched over to E-Vehicles/CNG/LNG vehicles in a time bound manner, replace the passenger vehicles to E-vehicle/CNG vehicles in phased manner. Further, for local movement of officials, Contract of Vehicles deployment shall be awarded to Project affected people and all efforts for adopting heavy E-vehicles/CNG/LNG vehicles like Bulkers for ash transportation for short distance subject to availability of such E-vehicle and adequate

charging infrastructure in the surrounding area shall be provided. PP shall submit the action taken report to concerned RO with amount spent, photographs (before & after), number of such non diesel vehicles deployed etc. in six monthly compliance report.

12) The Project Proponent shall provide stack of 275 meters height and shall abide by the provisions of the notification number G.S.R 465 (E) dated 11/07/2025 related to FGD.
13) Project proponent shall ensure that pipelines carrying the fly ash and effluent shall be inspected regularly for any leakages.
14) Effluent of 1080 KLD will be treated through Effluent Treatment Plant. As committed by the Project proponent, Zero liquid discharge shall be adopted for the existing and the proposed plant. No wastewater will be discharged outside the project site.
15) PP shall implement the concurrent plantation plan in a time bound manner. Total of 121.3 ha area (33% of total area of 365.19 ha) will be developed as greenbelt. A 5 m - 50 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines within 3 years. PP should annually submit the audited statement of expenditure along with proof of activities viz. photographs (before & after with geolocation date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC and on PARIVESH Portal as the case may be for the activities carried out during previous year.
16) Project proponent shall carry out community plantation with incentive scheme by distributing 50,000 saplings of native and fruit bearing plants per year for a period of five years. Further, PP shall provide basic facilities to the nearby schools such as drinking water, sanitation facilities (sanitary napkin vending machines) and shall also develop green belt around the nearby schools. Further, PP shall organize quarterly awareness programs for school students to educate them on the significance and preservation of trees.
17) Wildlife conservation plan as approved by the competent authority shall be implemented. Additional, budget shall be added in the plan, in case additional measures suggested by state wildlife department. The final Wildlife conservation plan duly approved by the CWLW shall be submitted to RO, MoEF&CC within a time frame of three months from the date of grant of EC and the budget approved by the concerned authority shall be deposited in a government account.
18) Project proponent shall install LED display of air quality (Continuous AAQ monitoring) and stack emission (Continuous emission monitoring) at prominent locations preferably outside the plant's main entrance for public viewing and in administrative complex and maintenance of devices shall be done regularly.
19) Project proponent shall carry out Water Sprinkling on roads inside the plant area/ administrative/ residential areas and outside the plant area at least for 2 KM on a regular basis to control the air pollution. A logbook shall be maintained for the activity and be in six-monthly compliance report.
20) PP shall deploy vacuum based vehicle for everyday cleaning of the road in and around plant site at least for 5 KM. A 3 tier plantation on both side of roads shall be done with native and fruit bearing species.
21) Environment Audit of plant shall be done annually and report shall be submitted to Regional office of the Ministry.
22) A detailed action plan regarding leachate handling shall be prepared and implemented in consultation with SPCB and the same shall be submitted to the Regional Office of the Ministry. Leachate shall be treated and reused. No treated leachate shall be discharged in any circumstances. Characteristics of Leachate and the treated leachate

shall be monitored once in quarter and records shall be maintained.

23) Oil and grease recovered from the treatment plant should be disposed only through authorized recyclers.
24) Monitoring of surface water quality and Ground Water quality shall also be regularly conducted in and around the project site and records to be maintained. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall also be undertaken and results/findings submitted along with half yearly monitoring report. The monitored data shall be submitted regularly on PARIVESH portal as part of Half Yearly compliance report
25) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
26) PP shall ensure that all types of plastic waste generated from the plant shall be stored separately in isolated area and disposed of strictly adhering to the Plastic Waste Management Rules 2016 (as amended). In pursuant to the Ministry's OM dated 18/07/2022. PP shall also create awareness among the people working in the project area as well as in its surrounding area on the ban on Single Use Plastic (SUP) in order to ensure compliance of Ministry's Notification published by the Ministry on 12/08/2021. A report along with photograph on the measures taken shall also be included in the six monthly compliance report submitted by PP.
27) PP is advised to implement the '***Ek Ped Maa Ke Naam***' Campaign which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than Green belt development. The action in this regard shall be submitted concerned RO in six monthly report.

[B] Socio-economic

1. A vision document comprising prospective plan for implementation of various CER activities, plantation programme outside the project cover area, rejuvenation and conservation of water bodies within 5 km radius of the project cover area shall be prepared and submitted to the Regional Office of the Ministry within 6 months. Implementation status of the same shall be reported to the Regional office in 6 monthly compliance report.
2. Epidemiological Study among population within 5 km radius of project cover area shall be carried out on regular interval (Once in two year) through independent agency. Necessary measures shall be taken as per findings of study in consultation with district administration. Action taken report shall be submitted to the Regional Office of the Ministry.
3. The budget proposed for PH is Rs. 46.50 Crores. The budget proposed shall be kept in a separate account and audited annually. Project proponent shall implement the action plan to address the issues raised during public hearing within a time frame of 5 years from the date of grant of EC. In addition to this, PP shall strengthen the existing Primary Health Center (PHC) & Community Health Center (CHC) in the study area for better public health as committed. Compliance status in this regard shall be submitted along with the six monthly compliance to the concerned Regional Office of MoEF&CC.
4. The establishment of a robust public grievance redressal mechanism to address concerns and complaints from local communities regarding the power plant's

operations, environmental impacts, or social issues shall be developed. A Senior Officer shall review the functioning of the mechanism twice in a month.

[C] Miscellaneous

1. An Environmental Cell headed by the Environment Manager with postgraduate qualification in environmental science/environmental engineering, shall be created. It shall be ensured that the Head of the Cell shall directly report to the Head of the Plant who would be accountable for implementation of environmental regulations and social impact improvement/mitigation measures.
2. Consent for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
3. All necessary clearance from the concerned Authority, as may be applicable should be obtained prior to commencement of project or activity.

B. General conditions

A. Statutory compliance:

1. Emission Standards for Thermal Power Plants as per Ministry's Notification S.O. 3305 (E) dated 7.12.2015, G.S.R.593 (E) dated 28.6.2018 and as amended from time to time shall be complied.
2. Part C of Schedule II of Municipal Solid Wastes Rules, 2016 dated 08.04.2016 as amended from time to time shall be complied for power plants based on Municipal Solid Waste.
3. MoEF&CC Notifications on Water Consumption vide Notification No. S.O. 3305 (E) dated 07.12.2015 read with G.S.R 593 (E) dated 28.6.2018 as amended from time to time shall be complied.
4. The recommendation from Standing Committee of NBWL under the Wildlife (Protection) Act, 1972 should be obtained, if applicable.
5. No Objection Certificate from Ministry of Civil Aviation be obtained for installation of requisite chimney height and its siting criteria for height clearance.

B. Ash content/ mode of transportation of coal:

1. MoEF&CC Notification issued vide S.O. 1561 (E) dated 21.05.2020 and as amended from time to time shall be complied which inter-alia include use of coal by Thermal Power Plants, without stipulations as regards ash content or distance, shall be permitted subject to compliance of conditions prescribed under (1) Setting Up Technology Solution for emission norms, (2) Management of Ash Ponds and (3) Transportation.

D. Air quality monitoring and Management:

1. Project proponent shall abide by the provisions of the notification number G.S.R 465(E) dated 11/07/2025 related to FGD.
2. Low NO_X Burners with Over Fire Air (OFA) system shall be installed to achieve NO_X emission standard of 100 mg/Nm^3.

3. High efficiency Electrostatic Precipitators (ESPs) shall be installed in each unit to ensure that particulate matter (PM) emission to meet the stipulated standards of 30 mg/Nm^3.
4. Stack with a height of 275 meters shall be provided with continuous online monitoring instruments for SO_2, Nox and Particulate Matter as per extant rules.
5. Exit velocity of flue gases shall not be less than 20-25 m/s. Mercury emissions from stack shall also be monitored periodically.
6. Continuous Ambient Air Quality monitoring system shall be set up to monitor common/criteria pollutants from the flue gases such as PM_{10}, $PM_{2.5}$, SO_2, NO_X within the plant area at four locations. The monitoring of other locations (at least three locations outside the plant area covering upwind and downwind directions at an angle of 120° each) shall be carried out manually.
7. Adequate dust extraction/suppression system shall be installed in coal handling, ash handling areas and material transfer points to control fugitive emissions.
8. Appropriate Air Pollution Control measures (Des/DSs) be provided at all the dust generating sources including sufficient water sprinkling arrangements at various locations viz., roads, excavation sites, crusher plants, transfer points, loading and unloading areas, etc.

E. Noise pollution and its control measures:

1. The Ambient Noise levels shall meet the standards prescribed as per the Noise Pollution (Regulation and Control) Rules, 2000.
2. Persons exposed to high noise generating equipment shall use Personal Protective Equipment (PPE) like earplugs/ear muffs, etc.
3. Periodical medical examination on hearing loss shall be carried out for all the workers and maintain audiometric record and for treatment of any hearing loss including rotating to non-noisy/less noisy areas.

E. Human Health Environment:

1. Bi-annual Health check-up of all the workers is to be conducted. The Occupational health study shall take into account of chronic exposure to noise which may lead to adverse effects like increase in heart rate and blood pressure, hypertension and peripheral vasoconstriction and thus increased peripheral vascular resistance. Similarly, the study shall also assess the health impacts due to air polluting agents.
2. Impact of operation of power plant on agricultural crops, large water bodies (as applicable) once in two years by engaging an institute of repute. The study shall also include impact due to heavy metals associated with emission from power plant.

F. Water quality monitoring and Management:

1. Induced/Natural draft closed cycle wet cooling system including cooling towers shall be set up with minimum Cycles of Concentration (COC) of 5.0 or above for power plants using fresh water to achieve specific water consumption of 3.0 m3/MWhr.
2. In case of the water withdrawal from river, a minimum flow 15% of the average flow of 120 consecutive leanest days should be maintained for environmental flow whichever is higher, to be released during the lean season after water withdrawal for proposed power plant.

3. Records pertaining to measurements of daily water withdrawal and river flows (obtained from Irrigation Department/Water Resources Department) immediately upstream and downstream of withdrawal site shall be maintained.
4. Regular (at least once in six months) monitoring of groundwater quality in and around the ash pond area including presence of heavy metals (Hg, Cr, As, Pb, etc.) shall be carried out as per CPCB guidelines. Surface water quality monitoring shall be undertaken for major surface water bodies as per the EMP. The data so obtained should be compared with the baseline data so as to ensure that the groundwater and surface water quality is not adversely impacted due to the project & its activities.
5. The treated effluents emanating from the different processes such as DM plant, boiler blow down, ash pond/dyke, sewage, etc. conforming to the prescribed standards shall be re-circulated and reused. Sludge/ rejects will be disposed in accordance with the Hazardous Waste Management Rules.
6. Hot water dispensed from the condenser should be adequately cooled to ensure the temperature of the released surface water is not more than 5 degrees Celsius above the temperature of the intake water.
7. Wastewater generation of 1080 KLD from various sources (viz. cooling tower blowdown, boiler blow down, wastewater from ash handling, etc) shall be treated to meet the standards of pH: 6.5-8.5; Total Suspended Solids: 100 mg/l; Oil & Grease: 20 mg/l; Copper: 1 mg/l; Iron:1 mg/l; Free Chlorine: 0.5; Zinc: 1.0 mg/l; Total Chromium: 0.2 mg/l; Phosphate: 5.0 mg/l.
8. Sewage generation of 8 KLD will be treated by setting up Sewage Treatment plant to maintain the treated sewage characteristics of pH: 6.5-9.0; Bio-Chemical Oxygen Demand (BOD): 30 mg/l; Total Suspended Solids: 100 mg/l; Fecal Coliforms (Most Probable Number).
9. Action plan by the TPPs located within 50 km of a municipality or any Urban Local Body (ULB) to use the treated sewage water produced by the municipality/Urban Local Body(ULB) to reduce fresh water consumption

G. Risk Mitigation and Disaster Management:

1. Adequate safety measures and environmental safeguards shall be provided in the plant area to control spontaneous fires in coal yard, especially during dry and humid season.
2. Storage facilities for auxiliary liquid fuel such as LDO and HFO/LSHS shall be made as per the extant rules in the plant area in accordance with the directives of Petroleum & Explosives Safety Organisation (PESO). Sulphur Content in the liquid fuel should not exceed 0.5%.
3. Ergonomic working conditions with First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
4. Safety management plan based on Risk Assessment shall be prepared to limit the risk exposure to the workers within the plant boundary.
5. Regular mock drills for on-site emergency management plan and Integrated Emergency Response System shall be developed for all kind of possible disaster situations.

H. Green belt and Biodiversity conservation:

1. Green belt shall be developed in an area of 33% of the total plant area with indigenous native tree species in accordance with CPCB guidelines.

2. In-situ/ex-situ Conservation Plan for the conservation of flora and fauna should be prepared and implemented.

I. Waste management:

1. Solid waste management should be planned in accordance with extant Solid Waste Management Rules, 2016.
2. Toxicity Characteristic Leachate Procedure (TCLP) test shall be conducted for any substance, potential of leaching heavy metals into the surrounding areas as well as into the groundwater.
3. Ash pond shall be lined with impervious liner as per the soil conditions. Adequate dam/dyke safety measures shall also be implemented to protect the ash dyke from getting breached. Planting shall be done all along the bank of ash pond.
4. Fly ash shall be collected in dry form and ash generated shall be used in phased manner as per provisions of the Notification on Ash Utilization issued by the Ministry S.O. 5481 dated 31.12.2021, S.O.6169 (E) dated 30.12.2021, S.O.05 (E) dated 01.01.2024 and amendment thereto.
5. Unutilized ash if any shall be disposed off in the ash pond in the form of High Concentration Slurry method.

J. Monitoring of compliance:

1. Environmental Audit of the project be taken up by the third party for preparation of Environmental Statement as per Form-V & Conditions stipulated in the EC and report be submitted to the Ministry.
2. Resettlement & Rehabilitation Plan as per the extant rules of Govt. of India and respective State Govt. shall be followed, if applicable.
3. Energy Conservation Plan to be implemented as envisaged in the EIA / EMP report. Renewable Energy Purchase Obligation as set by MoP/State Government shall be met either by establishing renewable energy power plant (such as solar, wind, etc.) or by purchasing Renewable Energy Certificates.
4. Energy and Water Audit shall be conducted at least once in two years and recommendations arising out of the Report should be followed. A report in this regard shall be submitted to Ministry's Regional Office.
5. The project proponent shall (Post-EC Monitoring):
   a. Send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government;
   b. Upload the clearance letter on the web site of the company as a part of information to the general public.
   c. Inform the public through advertisement within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forest and Climate Change (MoEF&CC) at http://parviesh.nic.in.
   d. Upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same periodically;

e. Monitor the criteria pollutants level namely; PM (PM10 & PM2.5 in case of ambient AAQ), SO2, Nox (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company;
f. Submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB;
g. Submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company;
h. Inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project and the date of commencement of the land development work.

K. Corporate Environmental Responsibility (CER) activities:

1. CER activities will be carried out as per Ministry's OM F.No.22- 65/2017- IA.III dated 30th September, 2020 and 22-65/2017- IA.III dated 25.02.2021 or as proposed by the PP in reference to Public Hearing or as earmarked in the EIA/EMP report along with the detailed scheduled of implementation with appropriate budgeting.

Agenda No 28.5

28.5 3x800 MW Sri Damodaram Sanjeevaiah Thermal Power Project **by M/s Andhra Pradesh Power Development Company Limited** located at Nelaturu Village, Muthukuru Mandal, SPSR Nellore District, Andhra Pradesh **– Amendment in Environment Clearance – regarding.**
[Proposal No. IA/AP/THE/542044/2025; F.No. J-13011/20/2007-IA.II(T)]

28.5.1: M/s Andhra Pradesh Power Development Company Limited has made an online application vide proposal no. IA/AP/THE/542044/2025 dated 21/07/2025 and sought for amendment in the existing Environment Clearances (ECs) dated 17/07/2007 & 02/07/2005 regarding utilization of additional ash pond of 100 acres which was already created at the side of existing ash pond of 119 acres (100 acres for pond + 19 acres for bunds) i.e., total of 219 acres ash pond in two lagoons under the provisions of the EIA Notification, 2006.

28.5.2: The EAC observed the following:

i. Project related documents have not been circulated to all the members of EAC by the project proponent.

ii. The Committee noted that as per the ECs accorded, the proponent was supposed to operate the TPP based on imported coal whereas the proponent is operating the TPP based on the domestic coal.

iii. It was apprised by the Member Secretary that as per the MoEF&CC O.M. dated 11/11/2020, 06/12/2023 and 07/01/2025 pertaining to change of coal source for

Thermal Power Plants, the exemption from requirement of amendment in Environmental Clearance for change in coal source for TPPs is applicable only for the following categories:

a. from domestic to domestic,
b. from domestic to domestic (blended with imported coal up to 30% content of imported coal)
c. from imported to imported (blended with domestic coal up to 10% content of domestic coal)
d. from imported to domestic (where the GCV of the domestic coal is of the same grade as of imported coal)

All the Thermal Power Plants (including Captive Power Plants) having Prior Environmental Clearance and going in for change in the coal source other than those falling in the aforementioned category of change in coal source shall approach the Ministry for amendment in environmental clearance along with a study on additional impact assessment and revised EMP based on the change in source of coal.

iv. The Hon'ble National Green Tribunal, Southern Zone, vide order in O.A. No. 105 of 2021 & IA No. 16 of 2023 (SZ) has disposed of the matter on 03/12/2024 with various directions. Among others, the Tribunal has directed:

- *"….As the applicants have agreed with the Joint Committee's report, which concluded that there is no monetary loss suffered by them with regard to the crop yield, the compensation for damages as claimed by the applicants cannot be granted.*
- *In order to sustain the principle of natural justice, we direct the APPCB to issue a show cause notice to the 8th and 9th Respondent on the amount arrived at by the Joint Committee and after enquiry pass appropriate orders, arriving at the final environmental compensation (if any) and recover the same from them.*
- *The Ministry of Environment, Forest & Climate Change (MoEF&CC) to examine under what authority M/s Sri Damodaram Sanjeevaiah Thermal Power Station has switched over to 100% Indian coal, deviating from the condition imposed in the prior Environmental Clearance, in light of the applicable rules and pronouncements of the Hon'ble NGT and Hon'ble Supreme Court….*

Considering the above, the EAC asked the Member Secretary to ensure compliance with the above direction of Hon'ble NGT as mentioned in the judgment dated 03.12.2024 and provide the complete status of its compliance.

Recommendations of the Committee

28.5.3: In view of the forgoing and after deliberations, the Committee ***recommended to return the proposal in its present*** form and asked the proponent to revisit the entire application by explicitly stating the compliance to the directions of Hon'ble NGT as per the judgement dated 03/12/2024. Further, the proponent was advised to ascertain the requirement of EC amendment from MoEF&CC for change in coal source from imported to domestic coal of CIL as per the MoEF&CC O.M. dated 11/11/2020 and its subsequent amendments. Thereafter, fresh EC amendment proposal shall be submitted by the proponent. Besides, the Committee asked the member secretary to obtain the certified compliance report from the Regional Office for the existing ECs including the change of coal source as stated in the judgement dated 03/12/2024 of Hon'ble NGT.

Agenda No 28.6

28.6: Proposed 2x660 MW Ennore SEZ Thermal Power Plant by **M/s. TANGEDCO (Presently M/s. Tamil Nadu Power Generation Corporation Limited)** at Village Vayalur, Taluk Ponneri, **District Thiruvallur, Tamil Nadu** – **Extension of validity of EC dated 7/01/2014 & CRZ clearance dated 01/01/2014 – reg.**
[Proposal No. IA/TN/THE/506571/2024] [F.No. J-13012/36/2010-IA.II(T) & F.No. 11-80/2011-IA.III]

28.6.1: M/s. TANGEDCO (Presently, M/s. Tamil Nadu Power Generation Corporation Limited) has made an online application vide proposal no. IA/TN/THE/506571/2024 dated 19/11/2024 along with CAF and Form 6 seeking validity extension of the EC dated 07/01/2014 under the provisions of EIA, Notification 2006 and validity extension of CRZ dated 01/01/2014. The proposed project activity is listed at item no. 1(d) Under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level.
Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting are given as under:

28.6.2: Details of the EC & CRZ clearance:
MoEF&CC has accorded following clearances and amendment to M/s. TANGEDCO for the 2x660 MW Ennore SEZ Thermal Power Plant

Sr. No.	Details of Letter No.	Facility	Clearance	Date of issuance
1.	11-80/2011-IA. III	Coal conveyer and cooling water system for the Ennore SEZ Thermal power station	CRZ	01/01/2014
2.	J-13012/36/2010-IA. II (T)	2x800 MW Ennore SEZ Super critical imported coal based Thermal power plant	Environment Clearance	07/01/2014
3.		Change in configuration of TPP from 2x800 MW to 2x660MW	EC amendment	14/08/2018
4.		2x660 MW Ennore SEZ Super critical imported coal based Thermal power plant	Extension of validity of EC till 06/01/2021	04/02/2019
5.	J-13012/36/2010-IA.II (T)	EC: 2x660 MW Ennore SEZ Super critical imported coal based Thermal power plant CRZ: Coal conveyer and cooling water system	Extension of validity of EC& CRZ till 31/12/2023	09/04/2021
6.	As per amendment to the EIA Notification, 2006 dated 18/01/2021, the period from the 1st April, 2020 to the 31stMarch, 2021 shall not be considered for the purpose of calculation of the period of validity of Prior Environmental Clearances granted under the provisions of this notification in view of outbreak of Corona Virus (COVID-19). As per amendment to the CRZ Notification, 2011 dated 03/07/2023, the period from the 1st April, 2020 to the 31stMarch, 2021 shall not be considered for the purpose of calculation of the period of validity of CRZ clearance granted under this notification in view of outbreak of Corona Virus (COVID-19). In view of the above, the validity of EC&CRZ will be expiring on 31/12/2024.			

28.6.3: Status of implementation of EC dated 07/01/2014 & CRZ clearance dated 01/01/2014 is given as below:

A. EC dated 07/01/2014

Sr. No.	Equipment	Percentage of completed portion (%)	Yet to be completed (in %)	Expected schedule of completion
1	Boiler & Auxiliaries Unit I & II	81	19	31.12.2025
2	Power House & Auxiliaries Unit I & II	63.26	36.74	31.12.2025
3	NDCT I & II	68.99	31.01	31.12.2025
4	Water system (RODM,PT,CWS)	67.17	32.83	31.12.2025
5	SWIO System	72.19	27.81	31.12.2025
6	Coal handling system	64.22	35.78	31.12.2025
7	Ash handling system	59.05	40.95	31.12.2025
8	400 KV GIS &Swithch yard	85.95	14.05	31.12.2025
9	Chimney	87.09	12.91	31.12.2025
10	Fire detection & Protection system	57.92	42.08	31.12.2025

B. CRZ clearance dated 01/01/2014:

Sr. No.	Description of facilities	Percentage of completed portion (%)	Yet to be completed (in %)	Expected schedule of completion
1	Coal pipe conveyor from Ennore Port	50	50	31.12.2025
2	CW intake pipeline from NCTPP complex	50	50	31.12.2025
3	CW outfall pipeline to NCTPP complex	50	50	31.12.2025

28.6.4: Reasons of the delay in implementation:

- The work was awarded to M/s. BHEL and another tenderer has filed a case before High court of Madras and the work was halted due to stay.
- Further, TANGEDCO approached Hon'ble Supreme court of India and after hearing, the judgement was pronounced in favour of TANGEDCO.
- As there was a delay of 2 years to recommence the work. Subsequently, there was a delay due to COVID 19.
- Hence, 70% of work has completed till date and rest of the work is progressing which shall require extension with validity of 1 year.

28.6.5: Proposal of project proponent: Project proponent has requested the Ministry to extend the validity of EC & CRZ clearance for another one year i.e. up to 31/12/2025 for completing the remaining work.

28.6.6: Details regarding pending court cases:

- A Suo-Moto case was filed by Hon'ble NGT in OA no. 162/2021 and NGT directed to obtain amendment in CRZ clearance for the change in route of pipe conveyor and CW lines.
- Subsequently, Miscellaneous Application [13 of 2024(SZ)] was filed before the NGT by the proponent to proceed with the construction activity of the conveyance corridor of the 2×660 MW Ennore SEZ Supercritical Imported Coal-based Thermal Power Plant in an approved route in CRZ Area as per the CRZ Clearance dated 01.01.2014 and

Environmental Clearance dated 07.01.2014, and best possible route in Non-CRZ Area in the interest of the project and environment, in compliance with Clause 7 (ii) (c) of EIA Notification, 2006.

- The Hon'ble NGT vide its order dated 23/09/2024 disposed of the above M.A. with the following observations:
  a. *As already the Project Proponent has approached the MoEF&CC in this regard, it is open to get their acknowledgement and try to stick to the original proposal without any deviation.*
  b. *Incidentally, when the application was taken up, it was brought to our knowledge that there were concrete structures to an extent of 5460 m^3, which were abandoned in the CRZ area have to be removed.*
  c. *The Chief Engineer - Tamil Nadu Power Generation Corporation Limited (TNPGCL) has filed an affidavit dated 21.09.2024, wherein it is stated that for the clearance of the above concrete structures, tenders have to be floated as per the Tamil Nadu Transparency in Tender Rules, 2000, which would approximately take 145 days or 5 months minimum.*
  d. *We, while disposing of this miscellaneous application, direct the Project Proponent to stick to the timeline given in the affidavit and remove the concrete structures within the time.*
- A case was filed before Hon'ble High court Madras in WP16353/2021and High court issued interim order to remove the dumped foreign materials and to restore the area and to obtain the compliance report from PWD.
- A case was filed before Hon'ble NGT Southern zone in O.A. 26/2025 challenging the validity extension of EC& CRZ clearance and next hearing schedule on 22.08.2025.

28.6.7: ADS Information in chronology: Proposal was considered in the EAC meeting held on 24/01/2025 and the same was deferred for want of additional information. The proponent uploaded the ADS reply through PARIVESH on 29.05.2025. Point-wise reply of ADS is given as below:

S No	ADS Point	Reply/Response of PP
i.	Credible document indicating the completion of 70% of construction work at the project site.	The project is in advanced stage of progress and has achieved around 70% physical progress. Major works of units such as cooling tower are under construction. Necessary photographs showing the progress of work are submitted herewith. The progress of 70% has been arrived at after proper ground assessment and therefore, is accurate.
ii.	Recommendations of the Coastal Zone Management Authority concerned for extending the validity of the CRZ clearance dated 01/01/2014.	Necessary recommendations of SCZMA for extension of EC&CRZ clearance obtained on 24.5.2025 and is submitted.
iii.	EC & CRZ transfer letter in the name of M/s. Tamil Nadu Power Generation Corporation Limited (TNPGCL).	Necessary recommendations of SCZMA for transfer of EC&CRZ clearance from M/s TANGEDCO to M/s TNPGCL is obtained on 24.5.2025 and is submitted
iv.	Point wise compliance to the observations made by Hon'ble NGT in its Order dated 23/09/2024 in Miscellaneous Application [13 of 2024(SZ)] along with the relevant	Points 1, 2 & 3) Necessary proposal has been already submitted to MOEF&CC under 7ii(c) of EIA notification 2006 on 15.5.2024 to adopt approved route in CRZ area as per original CRZ clearance dt 1.1.2014 and EC dt

S No	ADS Point	Reply/Response of PP
	supporting document.	7.1.2014 and best possible route in non CRZ area which stands acknowledged. Point 4 & 5) The abandoned concrete structures to an extent of 5460 m^3 in the CRZ area are being removed after awarding the contract. Around 1020 m^3 out of 5460 m^3 (around 20%) is removed already and the balance structures will be removed within a month to and thus, the directions of Hon'ble NGT(SZ) will be complied with. Point 6) TNPGCL has awarded the work and the work is being carried out as detailed in point (4) above and assured that abandoned concrete structures will be removed within a month's period.

Further ADS was raised on 31.05.2025. The proponent uploaded the ADS reply through PARIVESH on 05.06.2025. Point-wise reply of further ADS is given as below:

S. No.	ADS RAISED	REPLY	
1.	With respect to reply to point no. i of the ADS reply, tabular statement containing time bar chart indicating the status of construction, completion of different components envisaged under the EC dated 01/01/2014 and 07/01/2014 is totally missing .The time bar chart should also indicate the time frame required for completion of remaining components for which validity extension is sought.	The project is progressing with 72% completion and component wise progress is furnished in the Bar chart submitted. Time frame required to complete the project is 31.12.2025.	
2.	With respect to reply to point no. ii of the ADS reply, TANGEDCO is requested to submit the action plan to comply with the recommendations of TNCZMA.	**Conditions of DCZMA**	**Compliance report**
		1. The alignment of the Pipe Coal Conveyance System, Cooling Water Intake Pipeline and Blow Down Discharge Pipeline in CRZ Area, shall be strictly the same as the alignment approved in CRZ Clearance dated: 01.01.2014.	Original alignment approved in CRZ area as per CRZ clearance dt 1.1.2014 is being adopted.
		1. All the recommendations of the Environmental Management Plan shall be followed.	All the recommendations of Environmental Management plan are followed by erecting necessary ESP, Chimney, Cooling Tower, ETP, STP and provision of Green belt.
		1. The Mangroves in the Buffer Zone shall not be affected due to the proposed activity.	Mangroves in buffer zone will not be affected due to proposed activity. If warranted, mangrove will be replanted in consultation with forest Department.

		2. The project proponent, in consultation with Forest Department, formulate plans for the conservation, maintenance and development of mangroves in the area.	Arrangement is being made to plant Mangroves in the area in consultation with forest department.
		Conditions of TNSCZMA	**Compliance report**
		1. The Project Proponent to expedite the completion of the remaining works within the extended validity period, and avoid any further delays that may result in project stagnation or regulatory non – compliance.	Action is being taken to complete the remaining works in CRZ area within the extended period of 31.12.2025.
		2. The Project Proponent shall strictly adhere to the original design and alignment of pipelines and other foreshore facilities as approved under the earlier CRZ clearance. Any deviation shall require prior approval of TNSCZMA and MoEF& CC.	It is assured that original alignment approved in CRZ area as per CRZ clearance dt 1.1.2014 is being adopted for the pipelines and other foreshore facilities. If any deviation is necessary, prior approval of TNSCZMA and MOEF&CC will be obtained.
		3. The National Green Tribunal (NGT) had earlier issued specific directions regarding the alignment and implementation of the pipeline infrastructure. The Project Proponent is mandated to comply fully with all NGT directives and submit a compliance report to the authority.	All the directions of Hon'ble NGT(SZ) in the final order of MA 13/2024 are being complied and the detailed report furnished in the reply to ADS (3).
		4. All the conditions imposed by TNSCZMA & DCZMA should be followed stringently.	It is assured that all conditions of TNSCZMA and DCZMA are followed scrupulously.
3.	With respect to reply to point no. iii of the ADS reply, tabular statement containing directions passed by the Honble NGT and action taken by the proponent to comply with the same shall be submitted. Further, the directions wherein compliance is under progress, time frame with financial outlay for completion of the same shall be submitted.	**Directions of NGT (SZ)** 1. Pursuant to the order dated 31.01.2022 passed in O.A No.122 of 2021 (SZ) and O.A No.162 of 2021 (SZ), the Project Proponent had approached the MoEF& CC vide letter dated:15.05.2024 seeking the acknowledgment of the MoEF& CC for the proposal submitted with no deviation in CRZ area and slight deviation in non CRZ area under 7 (ii) (c) of the EIA Notification, 2006. 2. Before the acknowledgment is received, the above Miscellaneous Application is filed before us to permit the applicant to proceed with the construction activity of the conveyance corridor of the	**Action taken report** TNPGCL decided to adopt approved route in CRZ area and slight deviation in non CRZ area as per 7 (ii) (c) of the EIA Notification, 2006 and informed to MOEF&CC on 15.5.2024 and acknowledged on 20.5.2024. Informed under 7(ii) c of the EIA Notification, 2006 to MOEF&CC vide letter dt 15.5.2024 and acknowledged on 20.5.2024.

		2x660 MW Ennore SEZ Supercritical Imported Coal – based Thermal Power Plant in an approved route in CRZ Area as per the CRZ Clearance dated:01.01.2014 and Environmental Clearance dated:07.01.2014, and best possible route in Non- CRZ Area in the interest of the project and environment, in compliance with Clause 7 (ii) (c) of EIA Notification, 2006.	
		3. As already the Project Proponent has approached the MoEF& CC in this regard, it is open to get their acknowledgement and try to stick to the original proposal without any deviation.	It is assured that original alignment in CRZ area will be followed scrupulously.
		4. Incidentally, when the application was taken up, it was brought to our knowledge that there were concrete structures to an extent of 5460 $M^{3,}$ which were abandoned in the CRZ area have to be removed.	The abandoned concrete structures in CRZ area are removed and around 2160 m^3 out of 5460 m^3 has already been removed so far. The balance concrete structures will be removed within a month. Financial outlay for the above work is Rs. 2.22 crores.
		5. The Chief Engineer- Tamil Nadu Power Generation Corporation Limited (TNPGCL) has filed an affidavit dated 21.09.2024, wherein it is stated that for the clearance of the above concrete structures, tenders have to be floated as per the Tamil Nadu Transparency in Tender Rules, 2000, which would approximately take 145 days or 5 months minimum.	The tender was awarded in 4/2025 and the work is under progressing with 40%. The balance will be removed within a month.
		6. We, while disposing of this miscellaneous application, direct the Project Proponent to stick to the timeline given in the affidavit and remove the concrete structures within the time.	Direction being followed and removal of abandoned concrete has since begun. Entire abandoned concrete structures will be removed and disposed within stipulated time and Hon'ble NGT directions will be complied with.
		7. With the above directions, the Miscellaneous Application [M.A No.13 of 2024 (SZ) in O.A No.162 of 2021 (SZ)] is disposed of.	Action is being taken to comply with the directions of Hon'ble NGT(SZ).

4.	In addition to the above ,proponent is required to submit an undertaking that requisite name transfer in EC & CRZ from TANGEDCO to TNPGCL will be obtained from the concerned sectors of MOEF & CC	An undertaking stating that transfer of EC&CRZ clearance from M/s. TANGEDCO to M/s TNPGCL will be obtained from the concerned sector of MOEF&CC has been submitted.

**As on 30-06-2025 -- The abandoned concrete structures in CRZ area are removed and around 4095 m^3 (75%) out of 5460 m^3 has been removed so far. The balance concrete structures will be removed within 2 weeks.

28.6.8: Proposal was considered in the EAC meeting held on 08/07/2025 and the committee again deferred the proposal for want of additional information. The proponent uploaded the ADS reply through PARIVESH on 25.07.2025. Point-wise reply of further ADS is given as below:

S.No.	Remark	Reply
1	Increase in percentage of the completion of work from 70 to 72 % and corresponding details of the activities carried out after the expiry of the EC & CRZ on 31/12/2024 along with the geotagged photographs of the site.	70% of work was completed as on 18.11.2024 (At the time of submission of application for Extension of validity of EC & CRZ clearance for 1-year ie 31.12.2025) As on 31.12.2024, balance 2% works were completed. No new work orders issued and no works (Project work) are carried out after 31.12. 2024. Geo tagged photos, Undertaking and letter of intimation to stop the work issued to contractor beyond 31.12.2024 are enclosed. However, the essential works which are required to protect / safety of structure and plants such as Boiler ,Turbine, preservation of erected structures in the power plant area are being carried out.
2	Details of the Original application bearing no. 26 of 2025 along with the present status of the case and explanation from proponent for not disclosing the same in the reply to the additional information	TNPGCL submitted the reply for the ADS raised on 31.5.25 through letter dt 5.6.2025 (wherein replies for the ADS raised alone were submitted). The details of court cases pending at the High court as well as Hon'ble NGT along with present status are submitted. Further, the details regarding of OA No. 26 of 2025 were disclosed in the brief summary/ Basic Information and Affidavit/ Undertaking -2 circulated to the Ministry and EAC members.
3	Point wise response to the representation along with the relevant supporting documents	Pointwise response to the representation along with the supporting documents are submitted.

28.6.9: Summary of court cases

S. No.	Case no./ Title	Name of the Court	Brief Summary of the case	Last date of hearing	Next date of hearing	Direction/ Action taken by PP
1	WP 16353/ 2021	High court	Petitioner complained to remove the	13.3.2024	Final hearing pending	Interim order to remove the dumped foreign materials and

S. No.	Case no./ Title	Name of the Court	Brief Summary of the case	Last date of hearing	Next date of hearing	Direction/ Action taken by PP
			dumped foreign materials in the water body			to restore the area and to obtain the compliance report from PWD. The same was carried out in 2022 and compliance report received from PWD which was filed before the Hon'ble High court of madras on 13.03.2024 and the copy of PWD letter is enclosed. Next hearing is awaited
2	OA 26/ 2025	NGT(SZ)	Petitioner appealed to stop the Project work as the EC expires by 31.12.2024	15.07.2025	22.08.2025	As per direction of Hon'ble NGT (SZ), the counter affidavit filed on 16.4.2025 and additional affidavit is filed on 28- 07-2025. Next hearing is scheduled on 29.07.2025
3	MA 13/ 2024 of OA 162/ 2021	NGT(SZ)	As TNPGCL has decided to adopt the original route approved in CRZ clearance Dt 01.01.2014.Hence MA 13/2024 was filed to appraise the Hon'ble NGT(SZ) on above lines	Final order issued on 23.9.2024	Disposed	To remove the abandoned concrete structure of 5460 M3 in CRZ area. The abandoned concrete structures were removed and the area is restored on 21.07.2025. Necessary compliance report is being filed before Hon'ble NGT(SZ).

28.6.10: Details of SCN issued and violation if any: Nil

28.6.11: Written submissions

Project proponent submitted the following undertaking during the EAC meeting

TANGEDCO (presently TNPGCL) gives undertaking that after the expiry of EC & CRZ clearance on 31.12.2024, TANGEDCO (presently TNPGCL) have not undertaken any fresh works. The contractors have been asked not to commence any new works or major works, since the expiry of EC & CRZ clearance was on 31.12.2024.Some essential and residual components of works which began before 31.12.2024 continued in a skeleton way. TANGEDCO (presently TNPGCL) assured that new works will be taken up after obtaining Extension of EC & CRZ clearance.

Observations and deliberation of the EAC

28.6.12: The Committee observed and noted the following:

i. The instant proposal is for validity extension of the EC dated 07/01/2014 under the provisions of EIA, Notification 2006 and validity extension of CRZ dated 01/01/2014 for proposed 2x660 MW Ennore SEZ Thermal Power Plant by M/s. Tamil Nadu Power Generation Corporation Limited (TNPGCL) (Erstwhile TANGEDCO) at Village Vayalur, Taluk Ponneri, District Thiruvallur, Tamil Nadu.

ii. EAC noted that as proponent has submitted the recommendations of TNCZMA along with the action plan to comply with the said recommendations.

iii. Proponent has submitted that time barchart stating that all the pending works will be completed within the EC validity period i.e., by 31/12/2025. Further, proponent has submitted an undertaking stating that after the expiry of EC & CRZ clearance on 31.12.2024, TANGEDCO (presently TNPGCL) have not undertaken any fresh works. The contractors have been asked not to commence any new works or major works, since the expiry of EC & CRZ clearance was on 31.12.2024.

iv. There are two court cases pending with respect to the instant project. One case bearing number WP 16353/ 2021 is pending before the Hon'ble High Court of Chennai and one case bearing number OA 26/ 2025 is pending before the NGT(SZ).

Recommendations of the Committee:

28.6.13: In view of the foregoing and after detailed deliberations, the committee ***recommended*** the instant proposal for extension in validity of EC dated 07/01/2014 & CRZ clearance dated 01/01/2014 till 31/12/2025 under the provisions of EIA Notification, 2006 & CRZ Notification, 2011 **subject to uploading of written submission** on PARIVESH Portal and stipulation of the following additional specific conditions.

i. Project proponent shall abide by all orders and judicial pronouncements, made from time to time by the Hon'ble High Court of Madras in Writ Petition No. WP 16353/ 2021 and Hon'ble National Green Tribunal in Original Application No. 26 of 2025.

ii. Project proponent shall apply for transfer of EC and transfer of CRZ clearance in the name of M/s. Tamil Nadu Power Generation Corporation Limited within one month from the date of issue of the EC&CRZ clearance validity extension letter.

iii. All the recommendations of Tamil Nadu Coastal Zone Management Authority shall be strictly adhered with. Compliance status in this regard shall be submitted to the concerned Regional Office of the Ministry along with the six monthly compliance report.

All other terms and conditions stated in the EC dated 07/01/2014 and CRZ clearance dated 01/01/2014 shall remain unchanged.

Agenda No. 28.7

28.7 Expansion of Telangana Super Thermal Power Project by adding 3x800MW (Phase II) in existing 2x800MW (Phase I) by **M/s NTPC Limited** located at village Ramagundam, **District Peddapalli, Telangana -Environmental Clearance - regarding.**
[Proposal no. IA/TG/THE/544226/2025, F. No. J-13012/112/2010-IA. II(T)]

28.7.1: M/s. NTPC Limited has made an online application vide proposal no. IA/MP/THE/544226/2025 Dated 10.07.2025 along with copy of EIA/EMP report, Form-I (CAF, Part A, B & C) and Certified compliance report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed

at item no. 1(d) – Thermal Power Plants under Category 'A' of the schedule of the EIA Notification, 2006 and appraised at Central Level.

Name of the EIA consultant: M/s Mantec Consultants Pvt. Ltd. [S. No. 138 List of ACOs with their Certificate No.: NABET/EIA/2326/RA 0305_Rev. 01 (Valid up to 20.04.2026).

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

28.7.2: The project of Telangana Super Thermal Power Project, Phase-II (3x800MW) located at village Ramagundam, Kundanpalli, Ranapur etc. District Peddapalli, of Telangana State is for enhancement of power generation capacity from 1600 MW to 4000 MW with addition of 3 Units of 800 MW each based on Ultra Super Critical Technology & Air-Cooled Condenser.

28.7.3: The existing project was accorded environmental clearance vide lr. No. J-13012/112/2010-IA. II(T) dated 20/01/2016 from MoEF&CC. The Environmental Clearance was amended vide letter dated 06.03.2017, 21.10.2020, & 08.08.2022. Consent to Operate for the existing Phase-I (2x800MW) Units was accorded by Telangana State Pollution Control Board (TSPCB), Hyderabad vide Consent Order No. 20234665654 dated 16.08.2023. The validity of CTO is up to 31.12.2028.

28.7.4: Implementation status of the existing EC dated 20/01/2016

S. N.	Configuration	Capacity (MW)	As per EC dated	Implementation Status as on date	Production as per CTO
1	2x800 MW	1600	20/01/2016	Both the units have been commissioned and are under Commercial Operation.	1600 MW

28.7.5: Certified compliance report from Regional Office

The Status of compliance of earlier EC was obtained from MoEF&CC Sub-Office, Hyderabad vide letter no. 1-53/2024/SO-HYD dated 31.12.2024 in the name of NTPC Limited Telangana. The Action taken report regarding the partially/non-complied conditions was submitted to Sub-Office, MoEF&CC-Hyderabad, Telangana vide letter no. 09/EMG/Telangana Phase-II/2025/231 dated 06.02.2025. MoEF&CC (RO), Sub-Office, Hyderabad evaluated the same and subsequent submissions and has issued verified compliance status and issued report on 27.06.2025. The details of the observations made by RO in the report dated 27.06.2025 along with its re-assessment / present status as furnished by the PP is given as below:

S. No.	Non-compliances Details (EC Condition)	Observation of RO (abridged)	Condition no.			Re-assessment by RO / Compliance Status (Remarks of MoEF&CC, RO Hyderabad based on the ATR submitted by PP)
			EC date	Specific	General	
1	Long-term monitoring of temperature shall be undertaken onsite and off-site of the TPP, as data of decrease in temperature needs to be Verified. Further, requisite corrective action shall be taken based on the	PP has not monitored long-term temperature changes.	20.01.2016	(x)		Complied. PP engaged EPTRI to carry out a detailed study on "Long-term monitoring of temperature on-site and off-site of the TPP" and the study report has been submitted. In the report it is mentioned that the annual trend

S. No.	Non-compliances Details (EC Condition)	Observation of RO (abridged)	Condition no.			Re-assessment by RO / Compliance Status (Remarks of MoEF&CC, RO Hyderabad based on the ATR submitted by PP)
			EC date	Specific	General	
	findings of the monitoring.					analysis of ambient temperature data from the India Meteorological Department (IMD) for the period 1999–2024 (offsite) and from the NTPC Ramagundam Weather Monitoring Station for the period 2010–2024 (onsite) indicates a decreasing trend in maximum ambient temperature over the years. The ambient air temperature study for the Ramagundam area indicates a gradual decrease in both offsite and on-site temperature data over the study period.
2	The total Radioactivity in the working areas such as coal stock yard, fly ash pond shall be calculated based on the analysis results per unit weight of coal/ash. The total radioactivity in the atmosphere is to be compared with the maximum permissible dosage levels of each person working in those areas. This is to be conducted one in a year.	PP has not calculated total radioactivity based on the analysis results.	21.10.2020		ii	Complied. The undersigned verified with PP, who shared the final report of "Radioactivity Assessment Study in Coal and Ash storage areas at Telangana STPP" by email on 07.05.2025. The study was conducted by M/s. Isotope Application Services Board of Radiation and Isotope Technology Navi Mumbai. In the report, the Radiation monitoring at the coal and fly ash storage yards showed no significant deviation from background levels. As per AERB Directive No. 01/2011, the public exposure limit is 1 mSv/year. The maximum recorded dose rate of 28 µR/hr (at Ash Dyke-1 Lagoon-3 including the AWRS system), though observed only in isolated spots, was conservatively used for dose estimation. This corresponds to an annual dose of approximately 0.58 mSv/year for a standard work schedule, which is

S. No.	Non-compliances Details (EC Condition)	Observation of RO (abridged)	Condition no.			Re-assessment by RO / Compliance Status (Remarks of MoEF&CC, RO Hyderabad based on the ATR submitted by PP)
			EC date	Specific	General	
						well below the public exposure limit. Additionally, activity concentrations of radioactive elements in coal and ash samples were much lower than exemption limits set by IAEA SSR-6 Rev.1/2018.

In addition to the above, Status of installation of Flue Gas Desulphurization is furnished as per the MoEF&CC Notification dated 11/07/2025:

i. Ccategorization details of TPP as per CPCB
   - C: Other than those included in Category A and B

ii. Sulfur content of the coal to be fired in the boiler – 0.4- 0.6 %:

iii. Status of FGD installation for existing unit:
   - ***FGD erection, Commissioning status***: FGD Commissioned for Telangana Phase-I (Unit-I&II) and COD declared on 15.09.2024 & 30.09.2024 respectively.
   - ***FGD operational status***: Operational
   - ***Emission Norms compliance status***: Yes
   - ***Gypsum Disposal***: Gypsum is being sold to cement industries through e-auction by NTPC Vidyut Vyapar Nigam Limited (NVVN).

iv. ***Action plan for installation of new stack in compliance to the notification number GSR 742 (E) dated the 30/08/1990 for the proposed expansion***: Installation of 275m high stacks envisaged for the proposed expansion project in compliance to the notification GSR 742(E) dated 30.08.1990 as per Notification dated 11/07/2025.

28.7.6: The detail of the ToR is furnished as below:

Proposal No. with Date	Consideration	Details	Date of accord	ToR Validity
IA/TG/THE/458070/2024 dated 14/02/2024	6th EAC(Thermal) Meeting held on 27.02.2024.	Terms of Reference	10.04.2024	09.04.2028

28.7.7: Environmental site settings

S. No.	Particulars	Details	Remarks

<table>
<tr><td>1.</td><td>Total land</td><td>738.5503 Ha</td><td>Land Use: Existing under possession land (491.6923 Ha) is Industrial Land, Proposed to be acquired land (246.8580 Ha) is Agricultural land.</td></tr>
<tr><td>2.</td><td>Land use break up</td><td>
<table>
<tr><th colspan="3">Telangana STPP Land Break-up (in Ha.)</th></tr>
<tr><th colspan="2">Description</th><th>Area for Phase-I (in Ha.)</th><th>Area for Phase-II (in Ha.)</th><th>Total Area (Phase-I & II) (in Ha.)</th></tr>
<tr><td>A</td><td>Main plant and associated facilities</td><td>94.9</td><td>127.88</td><td>222.78</td></tr>
<tr><td>B</td><td>Ash Dyke Area</td><td>80.937</td><td>120</td><td>200.937</td></tr>
<tr><td>C</td><td>Total area considered for Greenbelt calculation (A+B)</td><td>175.837</td><td>247.88</td><td>423.717</td></tr>
<tr><td>D</td><td>Greenbelt Area</td><td>81.138</td><td>110.83</td><td>191.968</td></tr>
<tr><td>E</td><td>Other Misc. Area</td><td>-</td><td>122.8653</td><td>122.8653</td></tr>
<tr><td>F</td><td>Total Area (C+D+E)</td><td>256.975</td><td>481.5753</td><td>738.5503</td></tr>
</table>
</td><td>Out of total project area of 738.5503 Ha., an area of 246.8580 Ha. is proposed to be acquired for which Preliminary notification dated 05-09-2024 and demand letter dated 10.09.2025 has been issued by Revenue Dept.</td></tr>
<tr><td>3.</td><td>Land acquisition details as per MoEF&CC O.M. dated 07/10/2014 & 19/02/2025.</td><td>Out of total area of 738.5503 Ha., 491.6923 Ha area is under possession and 246.8580 Ha. proposed to be acquired for which preliminary notification is already issued by State Govt.
Main Plant and Associated Facilities for the proposed expansion project is envisaged to be located within the existing plant premises on available area. Approx. 246.858 hectares of land is identified nearby ash pond area of Ramagundam STPS on the Western side from which new Ash Pond is proposed to be developed on 120 Ha.
<table>
<tr><th colspan="2">Land Details</th><th>Phase-I, Ha.</th><th>Phase-II, Ha.</th><th>Total, Ha.</th></tr>
<tr><td rowspan="4">Available Land, Ha.</td><td>Govt.</td><td>97.9150</td><td>149.5280</td><td>247.4430</td></tr>
<tr><td>Pvt.</td><td>159.0600</td><td>85.1893</td><td>244.2493</td></tr>
<tr><td>Forest</td><td>NIL</td><td>NIL</td><td>NIL</td></tr>
<tr><td>Total</td><td>256.9750</td><td>234.7173</td><td>491.6923</td></tr>
<tr><td rowspan="4">To be acquired Land, Ha.</td><td>Govt.</td><td>NIL</td><td>NIL</td><td>NIL</td></tr>
<tr><td>Pvt.</td><td>NIL</td><td>246.8580</td><td>246.8580</td></tr>
<tr><td>Forest</td><td>NIL</td><td>NIL</td><td>NIL</td></tr>
<tr><td>Total</td><td>NIL</td><td>246.8580</td><td>246.8580</td></tr>
<tr><td colspan="2">Total, ha.</td><td>256.9750</td><td>481.5753</td><td>738.5503</td></tr>
</table>
</td><td>Land Details for existing available land and proposed acquisition are available and submitted with EC Application.</td></tr>
<tr><td>4.</td><td>Existence of habitation &</td><td>Project site: The land proposed to be acquired is purely agricultural land and no human habitation is involved. The</td><td>-</td></tr>
</table>

	involvement of R&R, if any.	land acquisition process has been initiated by the State Government, but the State Revenue has not proposed any R&R Plan at this stage. Study Area: Details of nearby villages are as per the following:	

Habitation/Village Name	**Distance (km)**	**Direction**
Ramagundam Village	4.5 km	NWW
Godavarikhani Town	3.5 km	W
NTPC Township	2.0 km	W
Annapurna Colony	1.0 km	N
Matangi Colony	1.3 km	SE
Elkalpally Village	5.7 km	SSE
Ranapur Village	6.4 km	SSW
Malyalpalli Village	2.7 km	W

School	**Distance (km)**	**Direction**
Zilla Parishad High School	0.9 km	NE
St. Claire High School	2.0 km	ENE
Kendriya Vidyalaya	2.3 km	NE
Sachdeva School	1.0 km	NE
Sri Chaitanya	1.6 km	NE
Rao's Techno School	1.2 km	NNE
St Mathews High School	1.4 km	N
Vishwa Shanthi High School	1.3 km	NNE

Hospital	**Distance (km)**	**Direction**
ESI Clinic/ Dispensary	1.1	NNE
Dhanvantari Hospital	1.9	E
SIMS medical college	3.5 km	NE

Protection measures to be adopted are as follows:

Control of Air Emissions: Provision of High Efficiency ESP, Low NOx Burner & Over Fire Air System, Dust Extraction Dust Suppression, Dry Fog Dust Suppression, Fog Cannons, Water Sprinkling on Hauling Roads ·

Noise: Acoustic Enclosures & barriers

Greenbelt Buffer: Development of dense greenbelt in the periphery of plant as well as towards the side of villages/ habitations, Afforestation/ Miyawaki Plantation on available land.
Wastewater: ETP, STP, AWRS, Zero Liquid Discharge · Rainwater Harvesting, Watershed Development in the vicinity.

Safety: Display signages, speed breakers, and crossing guards provision; optimization of heavy vehicle movement near villages, Disaster Management Plan & Provisions.

<table>
<tr><td></td><td></td><td>Health & Awareness: Regular health camps, distribution of masks, and environmental awareness programs for surrounding community.
A 250–500 m buffer from the Reserve Forests will be maintained.

No project activity to encroach upon forest land.

Wildlife crossings and signage will be provided based on biodiversity assessment.

Native species greenbelt development along the forest boundary.

Downcast, low-intensity lighting will be used near forest areas.

Night-time construction near sensitive zones will be minimized.

Awareness programs on forest and wildlife protection

Implementation of Wildlife Conservation Plan in consultation with Forest Dept.

CSR & Monitoring: Support for infrastructure and development, air and noise monitoring in the nearby</td><td></td></tr>
<tr><td>5.</td><td>Latitude and Longitude of all corners of the project site.</td><td>E. Main Plant
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>18°45'05" N</td><td>79°28'30" E</td></tr>
<tr><td>B</td><td>18°44'55" N</td><td>79°28'26" E</td></tr>
<tr><td>C</td><td>18°45'01" N</td><td>79°28'07" E</td></tr>
<tr><td>D</td><td>18°45'06" N</td><td>79°28'05" E</td></tr>
<tr><td>E</td><td>18°45'12" N</td><td>79°28'08" E</td></tr>
</table>
F. Ash Pond: Existing
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>18°43'22" N</td><td>79°29'11" E</td></tr>
<tr><td>B</td><td>18°43'08" N</td><td>79°29'10" E</td></tr>
<tr><td>C</td><td>18°42'36" N</td><td>79°28'25" E</td></tr>
<tr><td>D</td><td>18°43'05" N</td><td>79°28'24" E</td></tr>
</table>
G. Ash Pond: Proposed
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>18°45'24" N</td><td>79°22'46" E</td></tr>
<tr><td>B</td><td>18°46'6" N</td><td>79°23'31" E</td></tr>
<tr><td>C</td><td>18°45'48" N</td><td>79°23'37" E</td></tr>
<tr><td>D</td><td>18°45'30" N</td><td>79°23'37" E</td></tr>
<tr><td>E</td><td>18°45'16" N</td><td>79°24'9" E</td></tr>
<tr><td>F</td><td>18°45'6" N</td><td>79°24'25" E</td></tr>
<tr><td>G</td><td>18°44'54" N</td><td>79°24'25" E</td></tr>
<tr><td>H</td><td>18°44'47" N</td><td>79°24'28" E</td></tr>
<tr><td>I</td><td>18°44'56" N</td><td>79°24'10" E</td></tr>
</table></td><td></td></tr>
</table>

<table>
<tr><td></td><td></td><td><table><tr><td>J</td><td>18°45'9" N</td><td>79°23'31" E</td></tr></table></td><td></td></tr>
<tr><td>6.</td><td>Elevation of the project site</td><td>The general surface elevation of the main plant area is 140-170 m and ash dyke is 200-210m.</td><td>---</td></tr>
<tr><td>7.</td><td>Involvement of Forest land if any</td><td>Status of stage I Forest Clearance: Not Applicable
Area of the forest land involved: NIL
There is no Forest Land involved in the existing Phase-I and proposed Phase-II expansion Project.</td><td>---</td></tr>
<tr><td>8.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the project site as well as study area</td><td>Project site: NTPC Water Reservoir (Balancing Reservoir)
Study area: 10 km radius from the project area.<table><tr><th>S.N.</th><th>Name</th><th>Distance in Km</th><th>Direction</th></tr><tr><td colspan="4">Water Bodies</td></tr><tr><td>1</td><td>Godavari River</td><td>4.24</td><td>NE</td></tr><tr><td>2</td><td>NTPC Reservoir (Jyotisagar)</td><td>1.8</td><td>S</td></tr></table>Plant site (at an elevation of 140-170 m) is higher than the HFL of Godavari River (139m MSL)</td><td>As per the Irrigation and CAD Dept. letter dtd 06/02/2025, the observed maximum HFL of River Godavari is 139 m at Mancherial gauge station on 14.07.2022. The approx. distance of project site from HFL is 4km.</td></tr>
<tr><td>9.</td><td>Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area.</td><td>No Existence of ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. within the study area of 10 km.
List of Reserved and Protected Forests in study area:<table><tr><th>S.N.</th><th>Name</th><th>Distance in Km</th><th>Direction</th></tr><tr><td>1</td><td>Ramagundam R.F.</td><td>0.7</td><td>NNW</td></tr><tr><td>2</td><td>Putnur R.F.</td><td>3.4</td><td>WSW</td></tr><tr><td>3</td><td>Raidandi R.F.</td><td>4.0</td><td>WNW</td></tr><tr><td>4</td><td>Indaram R.F.</td><td>4.0</td><td>WSW</td></tr><tr><td>5</td><td>Ramgir R.F.</td><td>8.99</td><td>S</td></tr><tr><td>6</td><td>Khanam Palli R.F.</td><td>7.1</td><td>W</td></tr></table></td><td>Certificate ref. no. 821/S4/ 2024(i) dated 29.03.2025 has been issued by Forest Dept.- Govt. of Telangana regarding distance from nearest protected area.</td></tr>
<tr><td>10.</td><td>Archaeological sites monuments / historical temples etc.</td><td>No Archaeological sites within 10 km of study area.</td><td>--</td></tr>
<tr><td>11.</td><td>Facility envisaged in CRZ area (Only for coastal power plant)</td><td>Not Applicable</td><td>--</td></tr>
<tr><td>12.</td><td>Involvement of Critically Polluted Area/</td><td>No Involvement of Critically Polluted Area/ Severely Polluted area.</td><td>--</td></tr>
</table>

	Severely Polluted area as per 2018 CEPI score.		

28.7.8: The unit configuration and capacity of existing and proposed project is given as below:

S. N.	Existing Power Plant configuration and capacity	Proposed power plant configuration and capacity	Total Capacity	Technology adopted
1.	Telangana STPP Phase-I 2x800 MW (1600 MW)	Telangana STPP Phase-II 3X800 MW (2400 MW)	4000 MW	**Phase-I:** Ultra Super Critical with Water-Cooled Condenser System **Phase-II:** Ultra Super Critical Technology with Air-Cooled Condenser System

28.7.9: The details of the fuel (coal/LDO) requirement for the proposed project/ expansion cum proposed project along with its source and mode of transportation is given as below:

Details	Fuel requirement. (MTPA)	Source	Distance from site (kms)	Mode of Transpor -tation	Coal/LDO characteristics (Worst case scenario)	Linkage document
Existing TPP Phase-I (2x800 MW)	8 million TPA at 90% PLF	SCCL	15-300	Rail	Ash: 38-43(%) Sulphur: 0.4-0.6 (%) Moisture: 14 % GCV: 3300-3800 Kcal/Kg	Fuel Supply Agreement available with Singareni Collieries Company Limited.
LDO for Phase-I	8000 KL	BPCL, HPCL	590 KM	ROAD	Sulphur:1.5 % Max. GCV: 9000-10000 Kcal/Kg (approx.) As per applicable IS: 15770:2008	Purchase Orders for Supply of LDO
Proposed TPP Phase-II (3x800 MW)	11.70 Million TPA at 90% PLF considering 3800 Kcal/kg	SCCL	15-300	Rail	Ash: 38-43(%) Sulphur: 0.4-0.6 (%) Moisture: 14 % GCV:3300-3800 Kcal/Kg	SLC (LT) in its meeting dated 03.01.2024, has recommended Coal supply from SCCL.
LDO for Phase-II	9000 KL	BPCL, HPCL	590 KM	ROAD	Sulphur:1.5 % Max. GCV: 9000-10000 Kcal/Kg (approx.) As per applicable IS: 15770:2008	-

28.7.10: Water requirement: Existing Water requirement is 1,15,200 m^3/day which is obtained from Sreepada Yellampali Barrage on Godavari River and permission for the same has been obtained from Irrigation and CAD Dept. Govt of Telangana, vide letter no- G.O.Ms.No.54, dated 31.03.2015 (2.0

TMC Water Allocation given). The water requirement for the proposed for Phase-II project is estimated as 56,520 m^3/day, which will be obtained from Sreepada Yellampali Barrage on Godavari River. The permission for drawl of 2.73 TMC (~2,11,794 m^3/day) surface water is obtained from Irrigation and CAD Dept. Govt of Telangana, vide letter no- G.O.Ms.No.147, dated 09.10.2015. The water will be transported to the plant site through pipeline. The Specific water consumption for the power plant is less than 3.0 m^3/MWhr.

28.7.11: Power requirement: Existing power requirement of 92MW is obtained from Telangana STPP Phase-I. The power requirement for the proposed project is estimated as 162 MW, which will be obtained from the own generation.

28.7.12: Baseline Environmental Studies:

Period	**From March 2024 to May 2024**	**Additional study (if any)**
AAQ parameters at 10 locations (min. & max.)	• PM_{10} = 48 - 90 µg/m^3 • $PM_{2.5}$ = 28 - 50 µg/m^3 • SO_2 = 5 - 17 µg/m^3 • NO_x = 14 - 32 µg/m^3 • CO = 0.39 - 0.62 mg/m^3	---
Incremental GLC Level	**PROPOSED TELANGANA PHASE-II PROJECT** • PM_{10} = 0.566 µg/m^3 (Level at 1.25 km in NNW direction) • $PM_{2.5}$= 0.338 µg/m^3 (Level at 1.25 km in NNW direction) • SO_2 = 24.4 µg/m^3 (Level at 1.25 km in NNW Direction) • NO_2 =1.88 µg/m^3 (Level at 1.25 km in NNW direction) (@100 mg/nm^3) • NO_2 = 9.44 µg/m^3 (Level at 1.25 km in NNW direction) (@300 mg/nm^3) **Proposed measures for monitoring and Control of Air Pollution:** • High efficiency Electrostatic Precipitator (ESP) to control PM emissions with 275 m high stack for wider dispersion. • Use of Low-NOx burners and Over Fire Air to control NO_x emissions. • Dust Suppression system in coal handling and ash handling areas. • Regular maintenance of equipment to ensure efficient functioning. • Continuous Emission & Ambient Air Quality monitoring systems.	---
Ground water quality at **6** locations	pH: 7.05 to 7.51, Total Hardness: 316 to 436 mg/l, Chlorides: 80 to 142 mg/l, Fluoride: 0.14 to 0.26 mg/l. Heavy Metals: Fe: 0.154 to 0.254 mg/l, Cu: 0.005 to 0.025 mg/l, Zn: 0.025 to 0.442 mg/l, As :0.006 to 0.025 mg/l.	---
Surface water Quality at **6** locations	pH: 7.15 to 7.52; DO: 5.2 to7.9 mg/l and BOD: from 3.8 to 9.0 mg/l. COD: from 30 to 74 mg/l	
Effluent generation details and its treatment	**<u>Phase-I: Existing</u>** Plant Effluent generation: 62,400 KLD Wastewater Treatment / ETP Capacity: 31,200 KLD Mode of treatment & reuse: Neutralization for DM plant regeneration wastewater, Settling pit for Coal Settling, Oil Removal, Lamella	

<table>
<tr><th>Period</th><th>From March 2024 to May 2024</th><th>Additional study (if any)</th></tr>
<tr><td></td><td>clarifier/Tube settler for service water.
Treated Wastewater utilization in Cooling water makeup, dust suppression, ash handling, horticulture etc. within the plant maintaining Zero Liquid discharge (ZLD).
Rest of the effluents (31,200 KLD) shall be reused/recycled and Zero Liquid Discharge shall be maintained.
Domestic Effluent Generation: 1,920 KLD
STP Capacity: 3,500 KLD + 75 KLD STP additional
Mode of treatment & reuse: STP (MBBR Technology) and Tertiary Treatment and effluent recycling in horticulture maintaining Zero Liquid discharge (ZLD).</td><td></td></tr>
<tr><td></td><td><u>Phase-II: Proposed</u>
Plant Effluent generation: 32,040 KLD
Wastewater Treatment / ETP Capacity: 8,160 KLD
Mode of treatment & reuse: Neutralization for DM plant regeneration wastewater, Settling pit for Coal Settling, Oil Removal, Lamella clarifier/Tube settler for service water.
Treated Wastewater utilization in Aux. Cooling water makeup, dust suppression, ash handling, horticulture etc. within the plant maintaining Zero Liquid discharge (ZLD).
Rest of the effluents (23,880 KLD) shall be reused/recycled and Zero Liquid Discharge shall be maintained.
Domestic Effluent Generation: 576 KLD
STP Capacity: Existing 3,500 KLD + additional 75 KLD
Mode of treatment & reuse: STP with Tertiary Treatment and effluent recycling in horticulture maintaining Zero Liquid discharge (ZLD).</td><td></td></tr>
<tr><td>Noise levels (Day and Night)</td><td>40.1 dB(A) to 52.5 dB(A) for the daytime and 35.4 dB(A) to 42.8 dB(A) for the Nighttime.</td><td></td></tr>
<tr><td>Traffic assessment study findings</td><td>• Transportation of raw material (coal) will be done 100 % by rail.
• Coal is being transported by rail for the existing units and same is envisaged for coal transportation for the expansion as well.
• Rail Loading Facility has been provided for Dry Ash Loading and transportation also.
• Due to increase in economic activities, the existing vehicular movements may slightly increase with the proposed expansion.
• However, there shall be no significant impact due to use of Rail Transportation for coal and direct road connectivity with SH-1 which is passing nearby the project site.</td><td></td></tr>
<tr><td>Soil Quality at 10 Locations</td><td>pH range 7.08 to 7.46; Electrical conductivity (EC): 328 to 396 µmhos/cm; Potassium: 96.3 to 100.5 mg/kg; Nitrogen: 141.8 to 144.9 mg/kg; Phosphorous: 6.6 to 8.4 mg/kg; Cation Exchange Capacity (CEC): 13.92 to 16.84 meq/100 gm.</td><td></td></tr>
<tr><td>Flora & Fauna</td><td>List of schedules-I fauna and endangered Flora if any.: Yes

List of schedules-I species within the study area is as given below:
<table>
<tr><th>S. N.</th><th>Scientific Name</th><th>Common Name</th><th>IUCN</th></tr>
<tr><td>1</td><td>Melursus ursinus</td><td>Sloth Bear</td><td>VU</td></tr>
</table></td><td>Wildlife conservation plan prepared by M/s. Mantec Consultants</td></tr>
</table>

<table>
<tr><td>Period</td><td colspan="4">From March 2024 to May 2024</td><td>Additional study (if any)</td></tr>
<tr><td></td><td colspan="4">
<table>
<tr><td>2</td><td>Hystrix indica</td><td>Indian porcupine</td><td>LC</td></tr>
<tr><td>3</td><td>Panthera pardus</td><td>Common Leopard</td><td>VU</td></tr>
<tr><td>4</td><td>Panthera tigris</td><td>Tiger</td><td>EN</td></tr>
<tr><td>5</td><td>Herpestes edwardsii</td><td>Common mongoose</td><td>LC</td></tr>
<tr><td>6</td><td>Canis lupus</td><td>Indian Wolf</td><td>LC</td></tr>
<tr><td>7</td><td>Cuon alpinus</td><td>Indian wild Dog</td><td>EN</td></tr>
<tr><td>8</td><td>Canis aureus</td><td>Jackal</td><td>LC</td></tr>
<tr><td>9</td><td>Lutra lutra</td><td>Common Otter</td><td>NT</td></tr>
<tr><td>10</td><td>Ratufa indica</td><td>Indian Giant squirrel</td><td>LC</td></tr>
<tr><td>11</td><td>Rusa unicolor</td><td>Sambar</td><td>VU</td></tr>
<tr><td>12</td><td>Tetracerus quadricornis</td><td>Four -Horned Antelope</td><td>VU</td></tr>
<tr><td>13</td><td>Naja naja</td><td>King Cobra</td><td>LC</td></tr>
<tr><td>14</td><td>Python molurus</td><td>Indian Python</td><td>VU</td></tr>
<tr><td>15</td><td>Crocodilus palustris</td><td>Crocodiles</td><td>VU</td></tr>
<tr><td>16</td><td>Vipera russellii</td><td>Russell's Viper</td><td>LC</td></tr>
<tr><td>17</td><td>Pavo cristatus</td><td>Peafowl</td><td>LC</td></tr>
<tr><td>18</td><td>Milvus migrans</td><td>Black Kite</td><td>LC</td></tr>
</table>
Wildlife Conservation Plan with budgetary provision of Rs.2.92 Crores has been prepared for Sch.-I species and it has been approved by Principal Chief Conservator of Forests (PCCF) vide letter ref. WL-1/WL07/32/2024-WLS dated 26.03.2025.
Further, vide letter dated 12.08.2025, DFO-Peddapally clarified that the Tiger movement in 10 km study area is sporadic only and Indian Wolf & Indian Wild Dog are not sighted in last three years in 10 km study area.
</td><td>Pvt. Ltd. in consultation with State Forest Dept. and the same has been approved by PCCF, Telangana.</td></tr>
<tr><td>Hydrogeology study</td><td colspan="4">Recommendations of the Hydrogeology study:
<table>
<tr><th>S.N.</th><th>Study Recommendation</th><th>Proposed Action Plan</th><th>Estimated Expenditure & Target Date</th></tr>
<tr><td>1</td><td>Groundwater Quality Monitoring</td><td>Monitoring wells installation, Quarterly testing of water quality</td><td>13.4 Lakhs (0-6 months)</td></tr>
<tr><td>2</td><td>Development of Artificial Recharge Structures</td><td>Recharge wells, Recharge trenches, pond rehabilitation</td><td>28.0 (6-18 months)</td></tr>
<tr><td>3</td><td>Tree Plantation, Greenbelt Development</td><td>Tree Plantation & maintenance</td><td>45.00 (6-18 months)</td></tr>
<tr><td>4</td><td>Develop Monitoring systems</td><td>Equipments for monitoring, data management</td><td>10 (18-60 months)</td></tr>
<tr><td></td><td colspan="2">Total Budgetary provision, Rs. Lakhs</td><td>96.40</td></tr>
</table>
</td><td>Consultant details: Mantec Consultants Pvt. Ltd.</td></tr>
<tr><td>Impact study on biodiversity</td><td colspan="4">Impact on Terrestrial Ecology
The initial construction phase of the project entails clearing the land,</td><td>Consultant details: Mantec</td></tr>
</table>

Period	From March 2024 to May 2024	Additional study (if any)
and aquatic ecology	which may disturb vegetation during the process, though the extent of this disturbance is deemed insignificant. The effects of construction will mainly be localized to the Phase-II site, which is relatively small. Earthwork activities like excavation and filling may generate fugitive dust emissions, potentially depositing on nearby vegetation's young, growing leaves and temporarily inhibiting photosynthesis. However, these effects are anticipated to be mostly limited to the early stages of construction and can be mitigated by implementing measures such as paving, surface treatment, water spraying, and tree planting initiatives. Furthermore, these impacts are expected to be contained within the plant's boundaries, resulting in marginal overall impact from the construction activities. **Impact on Aquatic Ecology** The drainage from construction sites can cause a temporary rise in suspended solids and a drop in dissolved oxygen levels near where it enters a body of water. This could result in a temporary reduction in the photosynthetic capacity of phytoplankton, an increase in anaerobic conditions, and alterations in the food chain due to the decrease in dissolved oxygen levels. The proposed expansion project is envisaged with water & wastewater treatment plants, sewage treatment plant and Zero Liquid Discharge system. Hence, there will be no discharge into the water bodies and there will be no negative impact on aquatic ecology.	Consultants Pvt. Ltd.
Risk assessment study	Recommendations of Risk assessment report with mitigation measures: 1. Ensure that the facilities should have necessary fire and gas detection system in the Plant as per applicable guidelines. Operators should be well trained about the detection system. 2. Mock drills to be well rehearsed to ensure readiness to handle emergency. 3. All the valves and pipeline should be periodically maintained and inspected to prevent the failures. 4. Calibration of all instruments to be ensure periodically. 5. The company shall train all employees in Emergency Response, Fire Fighting and First Aid. 6. Proper lighting arrangements and CCTV as per applicable OISD guidelines should be provided at Plant. 7. HCl, H_2SO_4 and Alkali (NaOH) are used for water treatment. These acids and alkali are stored in storage vessels at atmospheric conditions. The noteworthy safety features involved are detailed below: • The vessels for alkali and acid storages are provided with the rubber lining of proper material. • All the storage vessels have been provided with dike for the containment of spillage from the storage vessels. The dike and the handling area are provided with acid/ alkali proof brick linings. • Eye wash and safety showers are available in the vicinity of these storage vessels. • The workers have been provided with the required type of	*Consultant details:* Mantec Consultants Pvt. Ltd.

Period	From March 2024 to May 2024	Additional study (if any)
	PPE, Chemical Protective Clothing, Splash Goggles, Boots, safety Shoes, Gloves, etc. • There is provision of sampling for each lot of acid /alkali before it is unloaded or used in the plant premises. It ensures the safety to equipment and the plant personnel.	
Marine impact assessment study. (Only for coastal based TPPs)	Not Applicable	-

28.7.13: Solid and hazardous waste management: The details of solid and hazardous waste generation along with its mode of treatment/disposal are furnished as below:

Estimated waste generation w.r.t Proposed Telangana Phase-II (3x800 MW)

S.N.	Type of Waste	Source	Estimated Quantity, MTPA	Mode of Treatment	Mode of Disposal	Remarks
Hazardous Waste						
1	Toxic metal containing residue from used ion exchange material in water purification	Water Treatment Plant	4.5 MT	NIL	Co-processing at Cement Industry / Incineration at TSDF/ AFR Facility	-
2	Used Resin	Water Treatment Plant	3.75 KL	NIL	Authorized TSDF	
3	Oil Soaked fuller's earth	Maintenance Activities	3.0 MT	NIL	Authorized TSDF/ Co-processing at Cement Industry	
4	Filters contaminated with oil (Used oil filters / Used Air filters)	Maintenance Activities	300 Nos	NIL	Authorized TSDF	
5	Contaminated cotton rags or other cleaning Materials	Maintenance Activities	5 MT	NIL	Co-processing at Cement Industry/ AFR Facility for preprocessing /TSDF	
6	Spent Activated	Water Treatment	4.5 MT	NIL	Co-processing at Cement	

S.N.	Type of Waste	Source	Estimated Quantity, MTPA	Mode of Treatment	Mode of Disposal	Remarks
	Carbon	Plant			Industry/ AFR Facility for preprocessing / TSDF	
7	Used Insulation Material (Glass Wool / Mineral Wool)	Maintenance Activities	300 MT	NIL	Authorized TSDF	
8	Silica Gel	O&M activities	1.5 MT	NIL		
9	Spent of Hydraulic Oil-transformer Oil, Used lube Oil.	O&M activities	225 KL	NIL	Authorized Re-Processors/ Recyclers	
10	Detoxified containers & container liners of Hazardous waste and hazardous chemicals.	Chemical Treatment	450 Nos./Month	NIL	Authorized Recycler	
11	Used oil grease drums	O&M activities	750 Nos. /Month	NIL	Authorized Recycler	
12	Waste Oil	O&M activities	150 KL	NIL	Authorized Re-Processors/ Recyclers / TSDF	
13	Oil tank sludge	O&M activities	1.5 MT	NIL	Authorized Re-processors/TSDF	
Non-Hazardous Waste						
S.N.	**Type of Waste**	**Source**	**Estimated Quantity, MT**	**Mode of Treatment**	**Mode of Disposal**	**Remarks**
1	Ferrous Scrap	O&M activities	835.5	NIL	Disposed through e-auction by MSTC	The quantity estimated based on annual waste generation during FY 2024–25.
2	Non-Ferrous Scrap	O&M activities	8.85	NIL	Disposed through e-auction by MSTC	
Municipal Solid Waste						
S.N.	**Type of Waste**	**Source**	**Estimated Quantity,**	**Mode of Treatment**	**Mode of Disposal**	**Remarks**

S.N.	Type of Waste	Source	Estimated Quantity, MTPA	Mode of Treatment	Mode of Disposal	Remarks
			MT			
1	Biodegradable Waste	Domestic Waste	39	NIL	Bio-methanation Plant, Vermi-composting / Conventional composting	The quantity is based on the waste generated during FY 2024-25 from the Townships at NTPC Ramagundam, Telangana.
2	Non-Biodegradable Waste	Domestic Waste	23	NIL	Waste to Energy Plant /Recyclers	

Biomedical Waste

S.N.	Type of Waste	Source	Quantity Generated, MT	Mode of Treatment	Mode of Disposal	Remarks
1	Biomedical Waste	Hospital in NTPC Township	0.0850	NIL	Disposed through authorized Recycler	The Hospital, situated in the NTPC Township, is a common facility for NTPC Ramagundam & Telangana Power Stations.

E-Waste

S.N.	Type of Waste	Source	Quantity Generated, MT	Mode of Treatment	Mode of Disposal	Remarks
1	E-Waste	Office	5.59	NIL	Disposed through authorized Recycler/ TSDF	

28.7.14: Public Consultation

Details of advertisement given	Eenadu Telugu News Paper 23.10.2024, 02.12.2024, 08.01.2025 Deccan Chronicle English News Paper 23.10.2024, 02.12.2024, 08.01.2025

Date of public consultation	28.01.2025 at 11:00 A.M.
Venue	Zila Parishad High School, NTPC-Jyotinagar, Ramagundam Mandal, District- Peddapalli
Presiding Officer	1. Sri K. Sree Harsha-Collector & District Magistrate, Pedaapalli District 2. Sri B. Bhikashapathi Environmental Engineer, Telangana Pollution Control Board, Regional Office, Ramagundam
Major issues raised	Provision of Employment to locals, increase CSR works, road and school infrastructure, pollution due to power plant, skill development training
No. of people attended	228 Nos. (as per signature taken by TGPCB) Actual attendees > 1000 nos.

Action plan as per MoEF&CC O.M. dated 30/09/2020:

S. No.	Key Area Identification for Activities Based on Public Needs Highlighted During Environmental Public Hearing	Year-wise Proposed Expenditures (Rs. In Crores)					Total Proposed Expenditure (Rs. In Crores)	Physical Targets
		1st	2nd	3rd	4th	5th		
A	**Educational Initiatives**							
1	Rehabilitation of mentally handicapped children of Manochaithanya.	0.10	0. 10	0.15	0.15	-	**0.50**	Financial support to Manochaithanya for rehabilitation of mentally handicapped children and Tie-up for utilization of products made by Manochaithanya as per the proposal.
2	Support rural primary education for weaker sections.	0.40	0.20	0.20	0.20	0.20	**1.20**	Distribution of water coolers, Smart classrooms systems, Books, cycles to schools of Anthergaon area, Rompikunta, Jangaon, manthani areas.
3	School facility in Elkalapalli	-	-	0.20	0.80	-	**1.00**	Additional 4 rooms in existing school building in Elkalapalli.
	Sub Total	**0.50**	**0.30**	**0.55**	**1.15**	**0.20**	**2.70**	
B	**Community Health Initiatives**							
4	Aids for Primary health centre & Veterinary hospital in Elakalapalli and other area	0.30	0.30	0.30	0.30	0.30	**1.50**	Health equipment's will be provided to Govt. PHC & Govt. veterinary hospital as per requirement near project vicinity.

S. No.	Key Area Identification for Activities Based on Public Needs Highlighted During Environmental Public Hearing	Year-wise Proposed Expenditures (Rs. In Crores)					Total Proposed Expenditure (Rs. In Crores)	Physical Targets
		1st	2nd	3rd	4th	5th		
5	Medical Facilities	1.00	1.00	1.00	1.00	1.00	**5.00**	Medical camps will be conducted through Mobile Medical Unit with two doctors (including 01 lady doctor) for general health check-up, ANC & PNC check-up etc in all the project affected villages. Free Medicines distribution during medical camps. Other than this, oral cancer detection camp, dental camp will be conducted for children and others.
	Sub Total	**1.30**	**1.30**	**1.30**	**1.30**	**1.30**	**6.50**	
C	**Sustainable Livelihood and Women Empowerment**							
6	Women welfare and other development activities.	0.50	0.50	0.50	0.50	0.50	**2.50**	Development of infrastructure & training of local women for dairy farms, poultry, agriculture, food processing, plastic moulding
		0.50	0.50	0.50	0.50	0.50	**2.50**	Vocational training to local women for skill development
	Sub Total	**1.0**	**1.0**	**1.0**	**1.0**	**1.0**	**5.00**	
D	**Community Rural Infrastructure Development**							
7	Road works in Malkapur village.	-	0.50	0.50	0.50	1.00	**2.50**	CC road laying 3 Kms approx.
8	Infrastructure facilities at Ramagundam.	4.00	4.00	5.00	5.00	2.00	**20.00**	Medipalli Crossroad to Medipalli village:CC/BT Road from Greenery, Central lighting & Dividers Internal CC roads, storm water drains & Underground drains in Annapurna colony, Auto nagar, Shalapally, poratpalli, CP office, Malkapur, nallah

S. No.	Key Area Identification for Activities Based on Public Needs Highlighted During Environmental Public Hearing	Year-wise Proposed Expenditures (Rs. In Crores)					Total Proposed Expenditure (Rs. In Crores)	Physical Targets
		1st	2nd	3rd	4th	5th		
								channelisation works in medipally area. Desilting at Ramagundam Cheruvu & Park development in Malkapur area.
9	Laying of CC Roads (2 Kms approx) in Penchikalpet.	0.50	0.50	-	-	-	**1.00**	CC road will be constructed in Penchikalpet village as per proposal.
10	CC Road laying Road along with Side drain works from Penchikalpet to Repallewada.	0.50	1.00	0.50	-	-	**2.00**	CC road will be constructed in Penchikalpet to Repallewada village as per proposal.
11	Laying of CC Road Errakunta at Laxmipur lake way Road.	0.50	1.00	0.50	-	-	**2.00**	CC road will be constructed in Errakunta at Laxmipur village as per proposal.
	Sub Total	**5.50**	**7.00**	**6.50**	**5.50**	**3.00**	**27.50**	
E	**Development of Playgrounds for Sports**							
12	Conducting Rural sports Programs in every year in all PAV's.	0.20	0.20	0.20	0.20	0.20	**1.00**	Rural sports will be conducted for school children of govt school in the nearby area and promoting local sport with sponsorship.
	Sub Total	**0.20**	**0.20**	**0.20**	**0.20**	**0.20**	**1.00**	
F	**Development of local youth & women for various activities at village level**							
13	Distribution of agriculture implements in Elkalapalli and others.	0.20	0.20	0.20	0.20	0.20	**1.00**	Distribution of agricultural implements & seeds. Training will be provided for using new technologies such as solar pump in agriculture and providing equipment.
14	Avenue plantation in Penchikalpet.	0.20	-	-	-	-	**0.20**	Raising of Avenue plantation through self-help groups. Distribution of fruit yielding saplings.
15	Skill development programs in Elkalapalli.	0.30	0.30	0.30	-	-	**0.90**	Training programs for professional services, competitive exams,

S. No.	Key Area Identification for Activities Based on Public Needs Highlighted During Environmental Public Hearing	Year-wise Proposed Expenditures (Rs. In Crores)					Total Proposed Expenditure (Rs. In Crores)	Physical Targets
		1st	2nd	3rd	4th	5th		
								physical fitness for police recruitment, plastic moulds, Tailoring etc for local youth in Elkalapalli.
	Sub Total	**0.70**	**0.50**	**0.50**	**0.20**	**0.20**	**2.10**	
G	**Providing water facilities to PAV's**							
16	Drinking Water supply arrangement in Kundanpalli village.	0.50	0.25	0.25	-	-	**1.00**	Pump house readiness, Pipeline laying till OH tank, Distribution lines connection.
17	Drinking Water supply arrangement in Moghalpad village.	0.30	0.70	-	-	-	**1.00**	Extension of lines from pump house till Moghalpahad Distribution lines connection.
18	RO Drinking Water plants at various villages.	0.25	0.50	0.50	0.25	-	**1.50**	New RO plant in Palakurthy, anthergaon and uplifting of existing 33 nos. RO plants at other villages.
19	Providing New RO plant at Mathangi colony.	0.20	0.10	-	-	-	**0.30**	RO plant will be provided to Mathangi Colony.
20	Desilting/Dredging of Chinthala water tank.	0.10	0.10	0.10	-	-	**0.30**	Desilting/ Dredging of Chinthala water tank.
	Sub Total	**1.35**	**1.65**	**0.85**	**0.25**	**-**	**4.10**	
H	**Sanitation**							
21	Drainage system development in Mathangi Colony.	0.50	-	-	-	-	**0.50**	Drainage system development in Mathangi Colony.
	Sub Total	**0.50**					**0.50**	
	Total (A+B+C+D+E+F+G +H)	**11.05**	**11.95**	**10.90**	**9.60**	**5.90**	**49.4**	

**The amount and year-wise phasing is tentative which shall be finalized after consultation with stakeholders and District Administration.*

28.7.15: Cost of project: Existing capital cost of project was Rs.13,708.00 Crores. The capital cost of the proposed project is Rs.27,683.29 Crores and the capital cost for environmental protection measures is proposed as Rs. 2,510.95 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 50.11 Crores. The employment generation from the proposed project / expansion is approx. 96 nos. & 216 nos. permanent employment during construction and operation phases respectively and approx. 3500 nos. & 1500 nos. contractual employment during construction and operation phases respectively. The details of cost for environmental protection measures are as follows:

S. No.	Item Description	Capital Cost, Rs. in Crores	Recurring Cost, Rs. in Crores
1.	Electrostatic Precipitator	605.72	12.11
2.	Chimney	228.00	4.56
3.	Aux. Cooling Towers incl. Civil Works	35.44	0.71
4.	Ash Handling System	1096.45	21.93
5.	Ash Dyke	150.00	3.0
6.	Ash Water Recirculation incl. ETP	311.73	6.23
7.	Dust extraction & suppression System	8.00	0.16
8.	DM plant, Waste Treatment systems	5.00	0.10
9.	Sewerage collection, treatment & disposal	2.00	0.04
10.	Rainwater Harvesting	0.64	0.01
11.	Green Belt, Afforestation & Landscaping	55.97	1.12
12.	Environmental Lab Equipment	0.50	0.01
13.	Environmental Monitoring Systems	6.40	0.13
15.	**Provision for Implementation of study recommendation**		
a.	Wildlife Conservation through Forest Dept.	2.92	--
b.	Watershed Development Plan	0.96	--
c.	Hydrogeology Study Recommendation	1.22	--
	TOTAL	2,510.95	50.11
1	Addressal of Public Consultation issues	49.4	--

28.7.16: Green belt development: Existing green belt has been developed in 125.95 ha area which is about 29.72 % of the total plant area of 423.717 ha with total sapling of 3.10 lakh Trees. Proposed greenbelt will be developed in 66.03 ha which is about 15.5 % of the total plant area of 423.717 ha. Thus, total of 191.968 ha area (45.3% of total plant area 423.717ha) will be developed as greenbelt. A 5 m - 50 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 2,67,200 saplings will be planted and nurtured in 66 hectares in 6-7 years.

28.7.17: Ash management (for last three years)

Year	Quantity Generated (MT)	Quantity utilized (MT)	% of Utilization	Balance Quantity (MT)	No of storage silos with capacity
2022-23	--	--	--	--	HCSD Silo: 700 MT x 3 Nos. Fly Ash Silo: 1180 MT x 4 Nos.
2023-24	6,81,000	0	0	6,81,000	
2024-25	27,35,982	7,46,785	27.29	26,70,197	

A. Fly ash details for last 3 years: 7,46,785 TPA (For FY 2024-25)

S. No.	Activity (as applicable)	Quantity Utilized, MT	Percentage of Total Fly Ash	Remarks (Prior approval of SPCB details to be mentioned)
1	Fly ash-based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	4,61,169	16.85	NA
2.	Cement manufacturing	2,38,043	8.70	NA
3.	Ready mix concrete	44,523	1.63	NA
4.	Construction of dams	3,050	0.11	NA
	Total	**7,46,785**	**27.29**	

B. Bottom Ash details for last 3 years: Nil

C. Legacy ash details:

All the two ash lagoons are operational since 2023-24, hence there is no legacy ash.

Unutilized Ash available in current compliance cycle is 26,70,197 MT at the end of 2024-25 which shall be utilized in subsequent years by 2025-28 as per the compliance cycle timeline.

D. Ash Pond Details: - Phase-I (Existing Ash Pond)

S.No	Details of Ash Pond	Ash Pond 2	Ash Pond 3	Total
14.	Status of ash pond (Active/Exhausted, yet to be reclaimed/ Reclaimed)	Active	Active	
15.	Area (Ha)	38.46	38.46	80.97 (incl. 4.05 Ha. for OFL) Active Ash Ponds
16.	Dyke height (m)	6 - 12 mtrs	2 - 13 mtrs	The dyke height varies as per Topography
17.	Volume (m^3)	24.50	20.50	
18.	Quantity of ash disposed (Metric Tons)	6.20	20.50	4.65 LMT/20.50 LMT lifted from dyke
19.	Available volume in percentage and quantity of ash can be further disposed (Metric Tons)	74.6% (18.30MT)	22.68% (4.65MT)	In ash utilization pits
20.	Expected life of ash pond (number of years and months)	9 Months	2 Months	Considering Nil ash utilization
21.	Type lining carried in ash pond: HDPE lining of LDPE Inning or clay Inning or No lining	HDPE	HDPE	
22.	Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD)	Wet (HCSD)	Wet (HCSD)	Bottom ash and HCSD are discharging in two separate places in same lagoon
23.	Ratio of ash: water in slurry mix (1:..)	65%:35%	65%:35%	
24.	Ash water recycling system (AWRS) installed and functioning: Yes or No	Yes	Yes	AWRS available and functioning

S.No	Details of Ash Pond	Ash Pond 2	Ash Pond 3	Total
25.	Quantity of wastewater from ash pond discharged into land or water body (m^3)	NA	NA	Seepage water in toe drains pumped back to OFL through 2 Nos. seepage water pump houses
26.	Last date when the dyke stability study was conducted and name of organization who conducted the study:	21.11.2024 by NIT Warangal		Safe & Stable
27.	Last date when the audit was conducted and name of the organization who conducted the audit:	17 – 19 Oct'2024 by NIT Warangal		No abnormality found

E. Proposed ash utilization plan for expansion project:

Details	Existing generation (MTPA)	Proposed generation (MTPA)	Total (MTPA)	Utilization (MTPA)	% of utilization	Balance quantity (MTPA)	No. of storage silos with capacity
Ash (Fly & Bottom)	27.35	41.02	68.37	68.37	100	NIL	**Dry Fly Ash Silos:** Main Silos: 5 x 2500 MT + 1 x 2000 MT with truck and Wagon loading facilities. HCSD Silos: 3 x 700 MT with truck loading facility only. **Bottom Ash Silos:** Main Bottom Ash Silos: 3 x 1500 MT with truck and wagon loading facilities.

Details	Existing generation (MTPA)	Proposed generation (MTPA)	Total (MTPA)	Utilization (MTPA)	% of utilization	Balance quantity (MTPA)	No. of storage silos with capacity
							Bottom Ash Intermediate Silo: 3 x 500 MT with truck loading facility only.

Ash Pond details: If existing ash pond is to be utilized details may be mentioned. If not, new ash pond details may be provided as below:

Ash Pond details: For Proposed ash pond

S. N.	Details of Ash Pond	Ash Pond
1.	Area (Ha)	120 Ha (including space required for ash disposal, decanted area, overflow lagoon, dyke embankment, toe drains, peripheral roads, ash pipe corridor, AWRS pump house and other facilities etc.).
2.	Dyke height (m)	One HCSD Lagoon: 12.0 M (avg) Starter dyke and two Raising of 3.0 M height. One BA Lagoon: 12.0 M (avg) Starter dyke and two Raisings of 3.0 M height each
3.	Volume (m^3)	Approx. 12 million m^3 (Ash disposition)
4.	Quantity of ash to be disposed (Metric Tons)	Approx. 12 million Metric Tons (Considering density as 1.0 T/cum)
5.	Expected life of ash pond (number of years and months)	02 years and 06 months (considering nil ash utilization) Originally ash pond area of 246.858Ha was envisaged considering proposed plant requirements due to uncertainties in 100% ash utilisation and was in line with MoEF&CC Notification dated 31.12.2021. However, as per direction given by Chairman EAC during EAC Meeting for optimization of new ash dyke area of Phase-II, the same is reduced from 246.858 Ha to 120 Ha. In the permitted 120 Ha ash pond, combined ash storage capacity of 01 HCSD lagoon and 01 BA lagoons is 12 million Metric Tons (approx.). Expected ash storage life of ash pond is approximately 2 years and 6 months (considering yearly ash generation of approx. 5 million Metric tons).
6.	Type lining carried in ash pond: HDPE lining of LDPE lining or clay lining or No lining	Suitable impervious lining as per actual site conditions meeting the imperviousness requirements as per standard "Guidelines for Design, Construction, O&M and Annual certification of Coal Ash Ponds-June 2023" to be provided. Accordingly, HDPE lining system is envisaged in OFL and Bentonite blended

S. N.	Details of Ash Pond	Ash Pond
		lining in all ash storage lagoons.
7.	Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD)	Wet Slurry Disposal for Bottom Ash (LCSD) & High Concentration Slurry Disposal (HCSD) system for Fly Ash.
8.	Ratio of ash: water in slurry mix	Maximum 25% ash on dry ash basis, rest is water for LCSD Slurry, 55% to 65% (Average-60%) of ash on dry ash basis, rest is water for HCSD slurry.
9.	Ash water recycling system (AWRS):	Ash water recycling system has been envisaged for the proposed project.
10.	Quantity of wastewater from ash pond to be discharged into land or water body (m3)	Ash Water Recirculation System and Zero Liquid Discharge system envisaged for the proposed expansion project. No wastewater discharge is envisaged.
11.	Details regarding dyke stability study and name of the organization who conducted the study.	As already done in all past ash dyke stability design, this will also be done by NTPC, (in-house design) in line with "CEA and CPCB Guidelines for Design, Construction, O&M and Annual certification of Coal Ash Ponds".

Proposed Ash Utilization Plan

MoEF&CC Compliance Cycle	Year	Ash Gene-ration (LMT)**	Backlog ash (LMT)	Ash Develop-ment (LMT)	Outside Bricks (in MT)	Own Brick Plant (LMT)	Cement & Other Industries (LMT)	Roads Construc-tion (LMT)	Ash Based Products (LMT)	Mines filling (LMT)	Total Ash Utilized (LMT)	Ash Utilization (%)
	Operation from Existing 2x800MW											
First	FY 2023-24	6.81		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	FY 2024-25	27.36		0.00	3.72	0.89	2.83	0.00	0.03	0.00	7.47	27.30
	FY 2025-26	27.35	4*	0.00	7.35	0.00	14	10.00	0.00	0.00	31.35	112
	FY 2026-27	27.35	4.34*	0.00	6.69	0.00	20.00	5.00	0.00	0.00	31.69	113
	FY 2027-28	27.35	5.00*	0.00	7.35	0.00	20.00	5.00	0.00	0.00	32.35	118
Second	FY 2028-29	27.35		0.00	7.35	0.00	20.00	0.00	0.00	0.00	27.35	100.00
	With commissioning of Phase-II (Unit-I) in 2029: Operation from 2x800MW + 1x800MW											
	FY 2029-30	41.02		0.00	8.00	0.50	23.00	4.52	0.00	0.00	36.02	87.81
	With commissioning of Phase-II (Unit-II) in 2030: Operation from 2x800MW + 2x800MW											
	FY 2030-31	54.70		0.00	13.00	1.67	32.00	13.03	0.00	0.00	59.70	109.14
Third	**With commissioning of Phase-II (Unit-III) in 2031: Operation from 2x800MW + 3x800MW**											
	FY 2031-32	68.37		0.00	12.00	0.83	35.00	20.54	0.00	0.00	68.37	100.00
	FY	68.37		0.00	13.0	0.8	40.00	14.54	0.00	0.0	68.3	100.

	2032-33				0	3				0	7	00
	FY 2033-34	68.37		0.00	14.00	0.83	45.00	8.54	0.00	0.00	68.37	100.00
***Out of unutilized ash mentioned at 17© above, quantity of 13.22 LMT of pond ash is non excavatable considering dyke safety and stability. ** Ash generation is calculated considering 80% PLF and 40% ash in coal**												

28.7.18: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration shall be furnished.

A. **Summary of court cases:**

The details of litigation/Court cases pertaining to Telangana STPP are as follows:

S.N.	Case Number / Title	Name of the Court	Brief summary of the case	Last date of hearing	Next date of hearing	Direction/ Action taken by the PP
1	Appeal No. 6 of 2023	NGT	The EC order for Telangana STPP Phase-I was challenged in NGT. NGT issued the directions to MoEF&CC to direct NTPC for fresh studies and then direct the EAC to appraise the same and issue necessary amendment to the EC dated 20.01.2016 by incorporating additional conditions for the purpose. The case was disposed by NGT vide order dated 27.05.2021. Based on the additional studies and their outcome, EAC recommended MoEF&CC for grant of amendment in EC with additional conditions. Subsequently, the EC amendment dated 08.08.2022 was issued by MoEF&CC. An appeal was filed to condone the delay in filing the appeal which challenges the Environmental Clearance (for short "EC") granted on 08.08.2022. The appeal for condonation of delay was dismissed.	Disposed of	Disposed of	Original Case (Appeal 46 of 2016) was disposed of vide NGT Order dtd. 27.05.2021. Appeal was dismissed by NGT order dated 05.07.2023.
2	Arbitration FAO(OS) (Comm) No 280 of 2023	Delhi High Court	Arbitration matter Award was passed by the Tribunal on 14.09.2022 allowing all the claims of the TPL and also 75% cost of arbitration to TPL. The financial implication of the award is Rs. 89,67,37,204.00 on NTPC Ltd. NTPC had challenged the award before Delhi High Court under	11.08.2025	11.09.2025	Pending

S.N.	Case Number / Title	Name of the Court	Brief summary of the case	Last date of hearing	Next date of hearing	Direction/ Action taken by the PP
			section 34 of Arbitration Act for Setting Aside the Award in which Judgment was pronounced on 31.07.2023 upholding the award in toto. Against the Judgement, NTPC has filed Section 37 Petition (appeal) before Divisional bench Delhi High Court on 27.09.2023.			

B. Summary of Show Cause Notices:

S.N.	Issuing authority	Date	*Reasons for issuance of SCN	Status of reply to submission	Present status
1	Telangana State Pollution Control Board (TGPCB)	22.05.2024	Excursion of online environmental parameters during April 2024.	Reply submitted vide Letter dtd. 18.06.2024	
2.		18.06.2024	Excursion of online environmental parameters during May 2024.	Reply submitted vide Letter dtd. 04.07.2024	
3.		06.07.2024	Excursion of online environmental parameters during June 2024.	Reply submitted vide Letter dtd. 22.07.2024	
4.		21.08.2024	Excursion of online environmental parameters during July 2024.	Reply submitted vide Letter dtd. 07.09.2024	
5.		13.09.2024	Excursion of online environmental parameters during August 2024.	Reply submitted vide Letter dtd. 03.10.2024	
6.		24.12.2024	Excursion of online environmental parameters during November 2024.	Reply submitted vide Letter dtd. 10.01.2025	
7.		17.01.2025	Excursion of online environmental parameters during Dec 2024.	Reply submitted vide Letter dtd. 04.02.2025	
8.		08.02.2025	Excursion of online environmental parameters during January 2025.	Reply submitted vide Letter dtd. 27.02.2025	
9.		13.03.2025	Excursion of online environmental parameters during February 2025	Reply submitted vide Letter dtd. 01.04.2025	
10.		30.04.2025	Notice on observations raised during site inspection by RO, Ramagundam, on 10-11 April 2025. The observation was mostly regarding fugitive emissions from ash dyke and haul roads.	Reply submitted vide Letter Dtd. 09.05.2025 addressing all observations.	

S.N.	Issuing authority	Date	*Reasons for issuance of SCN	Status of reply to submission	Present status
**** Show Cause Notices received from TGPCB were mostly related to exceedances in NOx values. Necessary corrective actions such as Low-NOx burners and Over Fire Air system are being taken by NTPC to achieve prescribed emission norms.***					

C. Summary of violation: There is no violation case pertaining to the project under the Environment Protection Act, 1986; Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980; the Wildlife (Protection) Act, 1972.

Written submissions

28.7.19: The proponent vide letter dated 14th August 2025 has submitted the following written submission as suggested by the EAC during the meeting.

1. Brief Summary of NGT issue pertaining to Telangana STPP Phase-I (2x800MW)

- EC for Telangana Phase-I (2x800 MW) was accorded by MoEF&CC vide letter ref. J-13012/112/2010.IA.II(T) dated 20.01.2016 which was challenged in National Green Tribunal (NGT) South Zone Bench-Chennai mainly on the grounds of cumulative impact assessment not covering 15 km radius area, quality of baseline study, concerns regarding air and water pollution, no CSR fund provision, coal linkage & radioactivity study and improper appraisal by EAC etc.
- NGT issued the directions to MoEF&CC to direct NTPC for fresh studies and then direct the EAC to appraise the same and issue necessary amendment to the EC dated 20.01.2016 by incorporating additional conditions for the purpose. The case was disposed by NGT vide order dated 27.05.2021.
- Based on the additional studies and their outcome, EAC recommended MoEF&CC for grant of amendment in EC with additional conditions. MoEF&CC vide letter dated 08.08.2022, issued amended EC.
- Additional Conditions given in EC and its compliance status is as given below:

S. N.	Condition as per EC amendment dated 08.08.2022	Compliance Status
(i)	Area of Ash Pond shall be reduced by 50%. Reduced area (200Acre) of Ash Pond shall be used for Greenbelt development, out of which 30 acres land (50m width) shall be used for creating plantation barrier between water storage area and ash pond so as to avoid mixing pollutants in the water body. Plantation shall be done by Miyawaki technique with 90% survival rate.	Area of Ash Pond is reduced to 50% by abandoning Lagoon-I which is of 200 acres. During the period of 2023-24, 71200 plantations by Miyawaki method was done between the reservoir and ash dyke for creating plantation barrier between water storage area and ash pond area and >90% survival rate is maintained. For the financial year 2024-25, plantation of 33,000 plants has been done at Ash Pond in consultation with TGFDCL.
(ii)	HDPE lining shall be provided to the Ash Pond and the height of the Ash Pond shall not increase beyond 16m.	HDPE lining in Ash Pond Area is completed. Current height of the bund at the lowest point is 6m (including 1.5m of free board) and 2m at highest point (including 1.5m of free board). In future 3 raising of 3mts each will be carried. At the lowest point in the ash pond the height of the bund will be 6+9=15m and at the highest point height of the bund will be 2+9=11m.
(iii)	All other condition mentioned in EC dated 20.01.2016 shall remain unchanged.	Noted and being complied

2. Reduction in Ash Pond area for proposed expansion project and revision of land use break-up
In line with the directions given by Chairman & members of the Expert Appraisal Committee during EAC Meeting dated 13.08.2025, optimization of area for proposed ash dyke under Telangana STPP Phase-II has been considered reducing the original proposed area from 246.858 Ha. to 120 Ha.

The revised land-use and area break-up for Telangana STPP (Phase-I & Phase-II) is as given below:

Telangana STPP Land Break-up (in Ha.)				
Description		**Area for Phase-I (in Ha.)**	**Area for Phase-II (in Ha.)**	**Total Area (Phase-I & II) (in Ha.)**
A	**Main plant and associated facilities**	94.9	127.88	222.78
B	**Ash Dyke Area**	80.937	120	200.937
C	**Total area considered for Greenbelt calculation (A+B)**	175.837	247.88	423.717
D	**Greenbelt Area**	81.138	110.83	191.968
E	**Other Misc. Area**	-	122.8653	122.8653
F	**Total Area (C+D)**	**256.975**	**481.5753**	**738.5503**

3. Revised details for increasing budget provision for Greenbelt Development: The budget provision for Greenbelt Development has been increased to Rs.50.11 Crores under the proposed Telangana STPP Phase-II (3x800MW). Revised Greenbelt Development Action Plan with budgetary provisions is as given below:

Year	**Plantation**		**Location of Plantation**	**Approx Cost, Crores**	**Plant Species**
	Nos.	**Area, Ha.**			
2024-25	10000 *	4.01	Railway siding Phase-1	2.28	Banyan, Peepal, Neem, Jamun, Amla, Arjun, Kadamba, Sandalwood, Tamarind, Indian Almond, Teak, Indian Beech (Pongamia pinnata) etc.
	23000 #	9.31	Area between Phase 1 Ash Pond and South Plant Boundary	5.26	
2025-26	48000	4.8	Area between Balancing Reservoir & Phase 1 Ash Pond	7.2	
2026-27	46000	4	Area between Balancing Reservoir & Phase 1 Ash Pond	6.9	
2027-28	35975	14.39	Inside Lagoon-1	7.91	
2028-29	37500	15.03	Inside Lagoon-1	8.25	
2029-30	20025	8.01	Area between Ash pipeline and Track Hoppe	4.45	
2031-32	6200	2.48	North side of project near highway	1.36	
2032-33	40500	4	Around the Proposed Ash Dyke	6.5	
Total	**267200**	**66.03**		**50.11**	
Gap Filling Plantation					

Year	Plantation		Location of Plantation	Approx Cost, Crores	Plant Species
	Nos.	Area, Ha.			
2025-26	1000	0.5	Between Ash Pond & Plant Boundary	0.22	
2026-27	500	0.2	Between Reservoir & Ash Pond	0.1	
2027-28	500	0.2	Between Reservoir & Ash Pond	0.1	
2028-29	1000	1	Inside Lagoon-1	0.22	
2029-30	1000	1	Inside Lagoon-1	0.22	
2030-31	800	0.4	Area between Ash pipe and Track Hopper	0.18	
Total	**4800**	**3.3**		**1.04**	

#: Completed, *: In progress

In addition to the above, budget provision of Rs. 5.86 Crores has been envisaged for Carbon Sink Plantation on approx. 55 Ha. Degraded Forest Land in consultation with State Forest Dept.

4. Revised cost provisions for Environmental Measures: Cost provisions for the Environmental Measures has been revised as given below:

S. N.	Item Description	Capital Cost, Rs. in Crores	Recurring Cost, Rs. in Crores
1.	Electrostatic Precipitator	605.72	12.11
2.	Chimney	228	4.56
3.	Aux. Cooling Towers incl. Civil Works	35.44	0.71
4.	Ash Handling System	1096.45	21.93
5.	Ash Dyke	150	3
6.	Ash Water Recirculation incl. ETP	311.73	6.23
7.	Dust extraction & suppression System	8	0.16
8.	DM plant, Waste treatment systems	5	0.1
9.	Sewerage collection, treatment & disposal	2	0.04
10.	Rainwater Harvesting	0.64	0.01
11.	Green Belt, Afforestation & Landscaping	55.97	1.12
12.	Environmental Lab Equipment	0.5	0.01
13.	Environmental Monitoring Systems	6.4	0.13
14.	Implementation of Wildlife Conservation plan	2.92	--
15.	Implementation of Hydrogeology Study recommendation	0.96	--
16.	Implementation of Watershed Development Plan	1.22	--
	Total	**2510.95**	**50.11**

S. N.	Item Description	Capital Cost, Rs. in Crores	Recurring Cost, Rs. in Crores
i	Cost provisions for addressing the issues raised in Environmental Public Hearing as per timebound action plan	49.4	--

5. Revised Action Plan for Watershed and Hydrogeology Study

Revised Action Plan with respect to recommendations of Watershed Development Study

Phase 1: Preparatory Stage

Activity	Timeline	Budget (Rs. Lakhs)	Responsible Agency	Expected Impact
1.1 Institutional Setup and Capacity Building	3 months	5.00	NTPC, District Administration, Society for Elimination of Rural Poverty (SERP)	Governance structure establishment
Set up Project Management Unit (PMU)				
1.2 Critical Infrastructure Assessment	2 months	6.00	Technical teams, local engineers	Infrastructure assessment completed
Total		**11.00**		
- Survey and map canal blockages in Sri Ram Sagar Project (SRSP) system				
- Assess farm wells for rejuvenation, identification of check dams, gully plugging sites, farm bunding and contour bunding sites and well rejuvenation sites.				
- Identify critical erosion sites				
- Conduct structural assessment of drainage channels				

Phase 2: Water Conservation and Management (6-36 months)

Activity	No. of Structures/ Area	Unit Rate (in Rs.)	Budget (Rs. Lakhs)
Check Dam (Gabion Types (4-10m in length and 1-2m wide)	9 No.	70,000/-	6.30
Farm Ponds 20mX20x3m	10 No.	2,50,000/-	25.00
Loose Boulder Structures (3x1x1m)	8 No.	15,000	1.20
Contour Bunding	75 ha	40,000/ha	30.00
Block Plantation/Agro Forestry	9 ha	30,00,000	30.00
Gully Plugging	13		
Farm Well Rejuvenation	3		
Farm Bunding	4 ha		
Canal Cleaning	3 Km		

Activity	No. of Structures/ Area	Unit Rate (in Rs.)	Budget (Rs. Lakhs)
Pond Rejuvenation	5 Nos.		
		Total	**92.50**

Phase 3: Livelihood Enhancement and Community Development (36-48 months)

Activity	Timeline	Budget (Rs. Lakhs)	Expected Impact
3.1 Agricultural Productivity Enhancement	36 months	5.00	Increase in crop productivity
Total		**5.00**	
Promote climate-resilient crop varieties			
Establish demonstration plots for best practices			
Support for organic farming initiatives			

Phase 4: Monitoring and Evaluation (Ongoing)

Activity	Timeline	Budget (Rs. Lakhs)	Frequency
4.1 Environmental Monitoring	Throughout project	9.20	Quarterly reporting
Groundwater monitoring from 10 wells		1.60	Quarterly
Surface water quality testing (10 locations)		1.60	Quarterly
Monitor soil erosion rates (10 locations)		1.00	Periodic
Track biodiversity changes		5.00	Once in five years
4.2 Socio-Economic Impact Assessment	-	5.00	As per policy
Conduct household surveys		-	As per policy
Track changes in agricultural productivity		-	As per policy
Assess improvement in water availability		-	As per policy
Evaluate community participation levels		-	As per policy
Total Phase-4		**14.2**	
Total Budget for Phase 1+2+3+4		**122.70 Lakh**	-

Revised Action Plan with respect to recommendations of Hydrogeology Study

Phase 1: Immediate Actions (0-6 months)

Component	Activity	Quantity	Unit Cost in Rs.	Total Cost (Rs.)
Groundwater Quality Monitoring				
Monitoring wells installation	Monitoring wells installation 10 wells (3 up gradient, 5 down gradients, 2 lateral)	10	1,20,000	12,00,000
Laboratory testing (outsourced)	Quarterly testing for 1 year	4 cycles	35,000	1,40,000
Phase I Total				**13,40,000**

Phase 2: Short-term Implementation (6-18 months)

Component	Activity	Quantity	Unit Cost in Rs.	Total Cost (Rs.)
2.1 Artificial Recharge Structures				
Recharge wells	Priority locations	10	20,000	2,00,000
Recharge trenches	Development	10	50,000	5,00,000
Existing pond rehabilitation	De-silting	20	50,000	10,00,000
Miscellaneous works		**20**	**55,000**	**11,00,000**
Sub-total 2.1				**28,00,000**
2.2 Green Belt Development				
Land preparation	Clearing, pit, digging, Manuring	3,000 trees	1500	45,00,000
Tree plantation	Local species			
Irrigation & maintenance	3 years maintenance			
Subtotal 2.2				**45,00,000**
Phase 2 Total				**Rs.73,00,000**

Phase 3: Long-term Sustainability (18-60 months)

Component	Activity	Quantity	Unit Cost in Rs.	Total Cost (Rs.)
Basic monitoring equipment	Automated systems	10 stations	30,000	3,00,000
Data management system	Simple setup	1	50,000	50,000
Administrative costs	3 years	-	-	50,000
Operational costs	3 years	-	2,00,000/year	6,00,000
Phase 3 Total				**Rs.10,00,000**
Total Budget for Phase 1+2+3				**Rs.96,40,000/**

6. Revised Action Plan for Solar PV installation: Solar PV capacity has been increased and revised to more than 5 MW capacity. Details of Solar PV capacity installation under existing Phase-I and revised capacity under proposed expansion has been given below:

S. N.	Location	Capacity, kw	Status
1	Rooftop of TG Hall, DM Plant, Switch yard etc. buildings in Phase-I	1253	Implemented
2	Rooftop of TG Hall, DM Plant, Switch yard etc. buildings in Phase-II	1500	To be installed under proposed Phase-II
3	Solar PV installations at various location	2500	
	Total	**5253**	

7. Additional mitigation measures for Monitoring and Control of Air Pollution: Following measures have been envisaged for monitoring and control of Air Pollution:

- High efficiency Electrostatic Precipitator (ESP) to control PM emissions in compliance with MoEF&CC norms

- 275 m high stack for wider dispersion as per MoEF&CC Norms
- Low-NOx burners
- Over Fire Air system
- Dry Fog Dust Suppression
- Dust Suppression Dust Extraction System
- Dust Suppression system like water sprinklers and fog cannons in ash handling areas
- Water Sprinkling on Ash Transportation hauling roads
- Installation of Continuous Emission Monitoring System (CEMS)
- Regular operation & maintenance of equipment ensuring efficient functioning
- Continuous Ambient Air Quality monitoring systems (CAAQMS)
- Dense plantation & greenbelt provision around the plant premises
- Dense plantation towards nearby villages, schools, hospitals etc.
- Carbon Sink Plantation on approx. 55 Ha. Degraded Forest Land in consultation with State Forest Dept.

8. Ash Utilization Plan as per compliance cycle given in Ash Utilization Notification

MoEF&CC Compliance Cycle	Year	Ash Generation (LMT)**	Backlog ash (LMT)	Ash Development (LMT)	Outside Bricks (in MT)	Own Brick Plant (LMT)	Cement & Other Industries (LMT)	Roads Construction (LMT)	Ash Based Products (LMT)	Mines filling (LMT)	Total Ash Utilized (LMT)	Ash Utilization (%)
	Operation from Existing 2x800MW											
First	FY 2023-24	6.81		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	FY 2024-25	27.36		0.00	3.72	0.89	2.83	0.00	0.03	0.00	7.47	27.30
	FY 2025-26	27.35	4*	0.00	7.35	0.00	14	10.00	0.00	0.00	31.35	112
	FY 2026-27	27.35	4.34*	0.00	6.69	0.00	20.00	5.00	0.00	0.00	31.69	113
	FY 2027-28	27.35	5.00*	0.00	7.35	0.00	20.00	5.00	0.00	0.00	32.35	118
Second	FY 2028-29	27.35		0.00	7.35	0.00	20.00	0.00	0.00	0.00	27.35	100.00
	With commissioning of Phase-II (Unit-I) in 2029: Operation from 2x800MW + 1x800MW											
	FY 2029-30	41.02		0.00	8.00	0.50	23.00	4.52	0.00	0.00	36.02	87.81
	With commissioning of Phase-II (Unit-II) in 2030: Operation from 2x800MW + 2x800MW											
	FY 2030-31	54.70		0.00	13.00	1.67	32.00	13.03	0.00	0.00	59.70	109.14
Third	**With commissioning of Phase-II (Unit-III) in 2031: Operation from 2x800MW + 3x800MW**											
	FY 2031-32	68.37		0.00	12.00	0.83	35.00	20.54	0.00	0.00	68.37	100.00
	FY 2032-33	68.37		0.00	13.00	0.83	40.00	14.54	0.00	0.00	68.37	100.00
	FY 2033-34	68.37		0.00	14.00	0.83	45.00	8.54	0.00	0.00	68.37	100.00
***Quantity of 13.22 LMT of pond ash is non excavatable considering dyke safety and stability, ** Ash generation is calculated considering 80% PLF and 40% ash in coal**												

- The above data is tentative and the actual ash generation as well as utilization shall depend upon a number of factors such as PLF, ash content of coal, demand of ash etc.
- Unutilized Ash at the end of 2024-25 has been envisaged to be utilized in FY 2025-26 & 2027-28 as indicated above.

Observation and deliberation of the EAC

28.7.20: The Committee observed and noted the following:

i. The instant proposal is for seeking Environment clearance for Expansion of Telangana Super Thermal Power Project by adding 3x800MW (Phase II) in existing 2x800MW (Phase I) by M/s NTPC Limited.

ii. The existing Phase-I (2x800MW) project was accorded environmental clearance vide lr. No. J-13012/112/2010-IA. II(T) dated 20/01/2016 from the Ministry of Environment and Forest, New Delhi. The Environmental Clearance was amended vide letter dated 06.03.2017, 21.10.2020, & 08.08.2022. Consent to operate (CTO) for the existing Phase-I (2x800MW) Units was accorded by Telangana State Pollution Control Board (TSPCB), Hyderabad vide Consent order no. 20234665654 dated 16.08.2023. The validity of CTO is up to 31.12.2028. Both the existing units have been commissioned and are under Commercial Operation.

iii. Installation of flue gas desulfurization (FGD) Plant has been commissioned and is operational for Phase-I (Unit-I&II). Commercial Operation Declaration (COD) declared on 15.09.2024 & 30.09.2024 respectively. NTPC Vidyut Vyapar Nigam Limited (NVVN) is selling gypsum produced as a byproduct of FGD processes to cement industries through e-auction.

iv. Installation of 275m high stacks shall be envisaged for the proposed expansion project in compliance to the notification G.S.R 465 (E) dated 11/07/2025 related to FGD.

v. Out of total project area of 738.5503 Ha, 491.6923 Ha area is under possession and 246.8580 Ha area is proposed to be acquired for which Preliminary notification dated 05-09-2024 and demand letter dated 10.09.2024 has been issued by the Revenue Dept.

vi. The EAC also took into consideration the drone survey of the project site and KML file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH portal.

vii. There are no ESZ/ ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. within the study area of 10 km distance from the project site as ascertained from DSS.

viii. There is no Forest Land involved in the existing Phase-I and proposed Phase-II expansion Project. There are Reserve Forest and Protected Forest within 10 km distance from the project site as ascertained from DSS. PP has obtained a Certificate from Forest department, Govt. of Telangana vide letter no. no. 821/S4/ 2024(i) dated 29.03.2025 regarding distance from nearest protected area.

ix. The project site is not located within the Critically Polluted Area (CPA) / Severally Polluted Area (SPA) as per CEPI assessment 2018 of CPCB.

x. The Status of compliance of earlier EC was obtained from MoEF&CC Sub-Office, Hyderabad vide letter no. 1-53/2024/SO-HYD dated 31.12.2024. The Action taken report regarding the partially/non-complied conditions has been submitted to Sub-Office, MoEF&CC-Hyderabad, Telangana vide letter dated 06.02.2025. The report has been deliberated by the committee and found it satisfactory.

xi. The ToR for the proposed Phase-II project was accorded on 10.04.2024 with a validity up to 09.04.2028. Public consultation was done in the presence of Collector & District Magistrate, Pedaapalli, Telangana. An amount of Rs. 49.4 Cr has been allocated to address the public needs highlighted during the public hearing held on 28.01.2025 for Phase-II project.

xii. The water requirement for the proposed Phase-II project is estimated as 56,520 m3/day, which will be obtained from Sreepada Yellampali Barrage on Godavari River. The permission for drawl of 2.73 TMC (~2,11,794 m3/day) surface water is obtained from Irrigation and CAD Dept. Govt of Telangana, vide letter no- G.O.Ms.No.147, dated 09.10.2015. The water will be

transported to the plant site through pipeline. The Specific water consumption for the power plant is less than 3.0 m3/MWhr.

xiii. Existing power requirement of 92MW is obtained from Telangana STPP Phase-I. The power requirement for the proposed project is estimated as 162 MW, which will be obtained from the own generation.

xiv. Existing capital cost of project was Rs.13,708.00 Crores. The capital cost of the proposed project is Rs.27,683.29 Crores and the capital cost for environmental protection measures is proposed as Rs. 2,510.95 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 50.11 Crores.

xv. Existing green belt has been developed in 125.95 ha area which is about 29.72 % of the total plant area of 423.717 ha with total sapling of 3.10 lakh Trees. Proposed greenbelt will be developed in 66.03 ha which is about 15.5 % of the total plant area of 423.717 ha. Thus, total of 191.968 ha area (45.3% of total plant area 423.717ha) will be developed as greenbelt. A 5 m - 50 m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 2,67,200 saplings will be planted and nurtured in 66 hectares in 6-7 years.

xvi. As per the revised categorization given in the Wildlife (Protection) Amendment Act, 2022, total 18 Schedule I Species found in the study area. A wildlife Conservation Plan with budgetary provision of Rs.2.92 Crores has been prepared for Sch.-I species and it has been approved by Principal Chief Conservator of Forests (PCCF) vide letter ref. WL-1/WL07/32/2024-WLS dated 26.03.2025..

xvii. Godavari River is located at 4.24 km from the project boundary. As per the Irrigation and CAD Dept. letter dated 06/02/2025, the observed maximum HFL of River Godavari is 139 m at Mancherial gauge station on 14.07.2022. The approx. distance of project site from HFL is 4 Km.

xviii. Coal requirement for the proposed project is estimated to be 11.7 MTPA at corresponding 90% PLF considering GCV of 3800 Kcal/Kg.

xix. The Fly Ash will be collected in dry form in silos for further utilization/transportation through rail wagons / closed trucks to adjacent Cement Plants. 100% Ash will be utilised in Cement Industries, reclamation of abandoned mines, manufacturing of bricks, road construction, and aggregate replacement in concrete, etc. as per Fly Ash Notification, 31st December'2021. Provision will be made for disposal of un-utilized ash in high concentration slurry form to ash dyke.

xx. Baseline data were collected during March to May 2024. The Committee deliberated on the baseline data and incremental GLC due to the proposed project. The committee noted that the proponent is providing high efficiency Electrostatic Precipitator (ESP), Low Nox Burner, Dust Suppression System to control the emission of Particulate matter and NOx and also stack with a height of 275 m will be provided to control & regulate the air emission from the proposed project.

xxi. The committee noted that with respect to water pollution control, proponent shall use Sewage treatment plant and treated sewage water shall be utilized for horticulture purpose. Effluent will be treated in ETP. There will be no effluent discharge from the premises, hence the ZLD will be maintained. A state-of-the-art roof top rain water harvesting system will be provided to collect the run -off for ground water recharging.

xxii. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components.

xxiii. EAC deliberated that the budget provision for hydrogeology study and watershed management plan is not adequate. PP was asked to submit the revised budget provision for the same. Accordingly, PP submitted the revised action plan of Hydrogeology study and watershed management plan. Committee deliberated on the revised action plan of Hydrogeology study/watershed management plan and found it satisfactory.

xxiv. EAC also suggested to install additional solar panel and increase the Solar capacity up to 5 MW. PP submitted the revised Action Plan for Solar photovoltaic (PV) installation which has

been increased and revised to more than 5 MW capacity. Committee deliberated on the revised Action Plan for Solar photovoltaic (PV) installation found it satisfactory.

xxv. EAC noted that PP has calculated the 33% green belt plantation in 423.717 ha land which include plant site and ash dyke area. EAC suggested to reduce the proposed ash disposal area and increase the green belt provision. EAC also suggested for plantation in nearby ETP area.

xxvi. EAC observed that the PM10 predicted value was on higher (90 ug/m3) in study area. PP was directed to install high efficiency ESP along with additional control measures to reduce the particulate matter in ambient air.

xxvii. PP needs to explore advance technology for dry ash handling system and new avenues of ash utilization to reduce the area of ash pond.

xxviii. EAC suggested for deepening of the ash pond to reduce the ash pond area upto 120 ha. In line with the same, optimization of area for proposed ash dyke under Telangana STPP Phase-II has been considered reducing the original proposed area from 246.858 ha to 120 ha.

xxix. PP needs to estimate the total green house gas emission and percentage of its sequestration in the proposed plant. PP has to adopt additional measures to reduce the stack emission to cure the air pollution.

xxx. There are 04 CAAQMS are installed in the Telangana STPP project. PP needs to establish one additional CAAQMS in the ash pond area.

xxxi. PP was asked to explore the use of nearby Municipal Corporation STP treated water.

xxxii. There are 10 show cause notices issued by TSPCB for non-adherence to the NOx norms. Proponent has taken necessary action to achieve the prescribed emission norms.

xxxiii. The EAC also deliberated on the written submissions of the project proponent and found it satisfactory.

xxxiv. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

Recommendations of the Committee:

28.7.21: In view of the foregoing and after detailed deliberations, the committee ***recommended*** the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 subject to uploading of **written submission on PARIVESH Portal** and stipulation of the following specific conditions and general conditions based on project specific requirements:

A. Specific conditions

[A] Environmental Management

1. Project proponent shall ensure that 100% utilization of ash generated from phase II(3x800MW) in accordance with the ash utilization notification dated 31/12/2021 and its subsequent amendments. Area for the additional ash pond proposed for phase II (3x800 MW) shall not exceed 120 Ha as committed.
2. In addition to the existing 4 Continuous Ambient Air Quality Monitoring Stations (CAAQMS), Project proponent shall install additional one continuous ambient air quality monitoring at suitable locations (preferably near proposed ash dyke area) in consultation with TGPCB within six months from the date of grant of EC as committed.
3. Project proponent shall comply with the recommendations made in the Watershed development and Hydrogeology study in a time bound manner. Compliance status in this regard shall be submitted to the Regional Office of MoEF&CC along with the six-monthly compliance report.

4. The water requirement for phase II is estimated as 56,520 m^3/day and the same shall be met from Sreepada Yellampali Barrage on Godavari River. The specific water consumption for phase II (3x800MW) shall be less than 3.0 m^3/MWhr.
5. The entire coal requirement for phase I(2x800MW) and phase II(3x800MW) shall be transported by Rail network only and no road transportation is permitted.
6. Project proponent shall store harvested rainwater in the project boundary and utilize the same for plantation, recharging water in the pond and domestic utilization in colonies. A record shall be maintained of water collected through rainwater and its supply system. PP shall get the water audit done every year to optimize the water requirement.
7. Project proponent shall implement the protective measure proposed in EMP in a time-bound manner. The budget earmarked for the same is Rs. 2,510.95 Crores and should be kept in separate accounts and audited annually. The implementation status along with the amount spent with documentary proof shall be submitted to the concerned Regional Office for the activities carried out during the previous year.
8. Project proponent shall assess the carbon footprint of the project and develop carbon sink/carbon sequestration resources using modern technologies. The implementation report shall be submitted to the concerned Regional Office of the MoEF&CC.
9. Project proponent shall ensure that diesel operated vehicles will be switched over to E-Vehicles/CNG/LNG vehicles in a time bound manner, replace the passenger vehicles to E-vehicle in phased manner. Further, for local movement of officials, Contract of Vehicles deployment shall be awarded to Project affected people and all efforts for adopting heavy E-vehicles/CNG/LNG vehicles like Bulkers for ash transportation for short distance subject to availability of such E-vehicle and adequate charging infrastructure in the surrounding area shall be provided. PP shall submit the action taken report to concerned RO with amount spent, photographs (before & after), number of such non diesel vehicles deployed etc. in six monthly compliance report.
10. Project proponent shall take all necessary steps to control the Air Quality and take additional mitigation measures for proposed TPP to maintain the Ambient Air Quality values within the NAAQS norms.
11. Project proponent shall ensure that pipelines carrying the fly ash and effluent shall be inspected regularly for any leakages.
12. Effluent of 32040 KLD will be treated through Effluent Treatment Plant (ETP). As committed by the Project proponent, zero liquid discharge shall be adopted for the existing and the proposed plant. No wastewater will be discharged outside the project site.
13. PP shall implement the concurrent plantation plan in a time bound manner. Total of 191.968 ha area (45.32% of total plant area of 423.717ha) will be developed as greenbelt. A 5 m - 50 m wide (min 25 m) greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines within 3 years. PP should annually submit the audited statement of expenditure along with proof of activities viz. geo-tagged photographs (before & after with date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC and on PARIVESH Portal as the case may be for the activities carried out during previous year.
14. Project proponent shall carry out community plantation with incentive scheme by distributing 50,000 saplings per year for a period of five years. Further, PP shall provide basic facilities to the nearby schools such as drinking water, sanitation facilities (sanitary napkin vending machines) and shall also develop green belt around the nearby schools. Further, PP shall organize quarterly awareness programs for school students to educate them on the significance and preservation of trees.
15. Wildlife conservation plan as approved by the competent authority shall be implemented. Additional, budget shall be added in the plan, in case additional measures suggested by state wildlife department. The final Wildlife conservation plan duly approved by the CWLW shall be submitted to RO, MoEF&CC within a time frame of three months from the date of grant of EC and the budget approved by the concerned authority shall be deposited in a government account.

16. Project proponent shall install LED display of air quality (Continuous AAQ monitoring) and stack emission (Continuous emission monitoring) at prominent locations preferably outside the plant's main entrance for public viewing and in administrative complex and maintenance of devices shall be done regularly.
17. Project proponent shall carry out Water Sprinkling on roads inside the plant area/ administrative/ residential areas and outside the plant area at least for 2 KM on a regular basis to control the air pollution. A logbook shall be maintained for the activity and be in six-monthly compliance report.
18. PP shall deploy vacuum based vehicle for everyday cleaning of the road in and around plant site at least for 5 KM.
19. Environment Audit of plant shall be done annually, and report shall be submitted to Regional office of the Ministry.
20. A detailed action plan regarding leachate handling shall be prepared and implemented in consultation with SPCB and the same shall be submitted to the Regional Office of the Ministry. Leachate shall be treated and reused. No treated leachate shall be discharged in any circumstances. Characteristics of Leachate and the treated leachate shall be monitored once in quarter and records shall be maintained.
21. Oil and grease recovered from the treatment plant should be disposed only through authorized recyclers.
22. Monitoring of surface water quality and Ground Water quality shall also be regularly conducted in and around the project site and records to be maintained. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall also be undertaken and results/findings submitted along with half yearly monitoring report. The monitored data shall be submitted regularly on PARIVESH portal as part of Half Yearly compliance report.
23. For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
24. PP shall ensure that all types of plastic waste generated from the plant shall be stored separately in isolated area and disposed of strictly adhering to the Plastic Waste Management Rules 2016 (as amended). In pursuant to the Ministry's OM dated 18/07/2022. PP shall also create awareness among the people working in the project area as well as in its surrounding area on the ban on Single Use Plastic (SUP) in order to ensure compliance of Ministry's Notification published by the Ministry on 12/08/2021. A report along with photograph on the measures taken shall also be included in the six-monthly compliance report submitted by PP.
25. PP shall install additional solar panel and increase the Solar capacity up to 5 MW as committed.
26. PP is advised to implement the '***Ek Ped Maa Ke Naam***' Campaign which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than green belt development. The action in this regard shall be submitted concerned RO in six monthly reports.

[B] Socio-economic

1. A vision document comprising prospective plan for implementation of various CER activities, plantation programme outside the project cover area, rejuvenation, and conservation of water bodies within 5 km radius of the project cover area shall be prepared and submitted to the Regional Office of the Ministry within 6 months. Implementation status of the same shall be reported to the regional office in 6 monthly compliance report.
2. Epidemiological Study among population within 5 km radius of project cover area shall be carried out on regular interval (Once in two year) through independent agency. Necessary measures shall be taken as per findings of study in consultation with district administration. Action taken report shall be submitted to the Regional Office of the Ministry.
3. The budget proposed for PH is Rs. 49.4 Crores. The budget proposed shall be kept in a separate account and audited annually. Project proponent shall implement the action plan to address the issues raised during public hearing within a time frame of 3 years from the date of

grant of EC. In addition to this, PP shall strengthen the existing Primary Health Center (PHC) & Community Health Center (CHC) in the study area for better public health as committed. Compliance status in this regard shall be submitted along with the six-monthly compliance to the concerned Regional Office of MoEF&CC.

4. The establishment of a robust public grievance redressal mechanism to address concerns and complaints from local communities regarding the power plant's operations, environmental impacts, or social issues shall be developed. A Senior Officer shall review the functioning of the mechanism twice in a month.

[C] Miscellaneous

1. An Environmental Cell headed by the Environment Manager with postgraduate qualification in environmental science/environmental engineering, shall be created. It shall be ensured that the Head of the Cell shall directly report to the Head of the Plant who would be accountable for implementation of environmental regulations and social impact improvement/mitigation measures.
2. Consent for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
3. All necessary clearance from the concerned Authority, as may be applicable should be obtained prior to commencement of project or activity.

B. General conditions

A. Statutory compliance:

1. Emission Standards for Thermal Power Plants as per Ministry's Notification S.O. 3305 (E) dated 7.12.2015, G.S.R.593 (E) dated 28.6.2018 and as amended from time to time shall be complied.
2. Part C of Schedule II of Municipal Solid Wastes Rules, 2016 dated 08.04.2016 as amended from time to time shall be complied for power plants based on Municipal Solid Waste.
3. MoEF&CC Notifications on Water Consumption vide Notification No. S.O. 3305 (E) dated 07.12.2015 read with G.S.R 593 (E) dated 28.6.2018 as amended from time to time shall be complied.
4. The recommendation from Standing Committee of NBWL under the Wildlife (Protection) Act, 1972 should be obtained, if applicable.
5. No Objection Certificate from Ministry of Civil Aviation be obtained for installation of requisite chimney height and its siting criteria for height clearance.

B. Ash content/ mode of transportation of coal:

1. MoEF&CC Notification issued vide S.O. 1561 (E) dated 21.05.2020 and as amended from time to time shall be complied which inter-alia include use of coal by Thermal Power Plants, without stipulations as regards ash content or distance, shall be permitted subject to compliance of conditions prescribed under (1) Setting Up Technology Solution for emission norms, (2) Management of Ash Ponds and (3) Transportation.

C. Air quality monitoring and Management:

1. Project proponent shall abide by the provisions of the notification number G.S.R 465(E) dated 11/07/2025 related to FGD.
2. Low NO_X Burners with Over Fire Air (OFA) system shall be installed to achieve NO_X emission standard of 100 mg/Nm^3.
3. High efficiency Electrostatic Precipitators (ESPs) shall be installed in each unit to ensure that particulate matter (PM) emission to meet the stipulated standards of 30 mg/Nm^3.
4. Stack with a height of 275 meters shall be provided with continuous online monitoring instruments for SO_2, Nox and Particulate Matter as per extant rules.

5. Exit velocity of flue gases shall not be less than 20-25 m/s. Mercury emissions from stack shall also be monitored periodically.
6. Continuous Ambient Air Quality monitoring system shall be set up to monitor common/criteria pollutants from the flue gases such as PM_{10}, $PM_{2.5}$, SO_2, NO_X within the plant area at five locations. The monitoring of other locations (at least three locations outside the plant area covering upwind and downwind directions at an angle of 120° each) shall be carried out manually.
7. Adequate dust extraction/suppression system shall be installed in coal handling, ash handling areas and material transfer points to control fugitive emissions.
8. Appropriate Air Pollution Control measures (Des/DSs) be provided at all the dust generating sources including sufficient water sprinkling arrangements at various locations viz., roads, excavation sites, crusher plants, transfer points, loading and unloading areas, etc.

D. Noise pollution and its control measures:

1. The Ambient Noise levels shall meet the standards prescribed as per the Noise Pollution (Regulation and Control) Rules, 2000.
2. Persons exposed to high noise generating equipment shall use Personal Protective Equipment (PPE) like earplugs/ear muffs, etc.
3. Periodical medical examination on hearing loss shall be carried out for all the workers and maintain audiometric record and for treatment of any hearing loss including rotating to non-noisy/less noisy areas.

E. Human Health Environment:

1. Bi-annual Health check-up of all the workers is to be conducted. The Occupational health study shall take into account of chronic exposure to noise which may lead to adverse effects like increase in heart rate and blood pressure, hypertension and peripheral vasoconstriction and thus increased peripheral vascular resistance. Similarly, the study shall also assess the health impacts due to air polluting agents.
2. Impact of operation of power plant on agricultural crops, large water bodies (as applicable) once in two years by engaging an institute of repute. The study shall also include impact due to heavy metals associated with emission from power plant.

F. Water quality monitoring and Management:

1. Induced/Natural draft closed cycle wet cooling system including cooling towers shall be set up with minimum Cycles of Concentration (COC) of 5.0 or above for power plants using fresh water to achieve specific water consumption of 3.0 m^3/MWhr.
2. In case of the water withdrawal from river, a minimum flow 15% of the average flow of 120 consecutive leanest days should be maintained for environmental flow whichever is higher, to be released during the lean season after water withdrawal for proposed power plant.
3. Records pertaining to measurements of daily water withdrawal and river flows (obtained from Irrigation Department/Water Resources Department) immediately upstream and downstream of withdrawal site shall be maintained.
4. Regular (at least once in six months) monitoring of groundwater quality in and around the ash pond area including presence of heavy metals (Hg, Cr, As, Pb, etc.) shall be carried out as per CPCB guidelines. Surface water quality monitoring shall be undertaken for major surface water bodies as per the EMP. The data so obtained should be compared with the baseline data so as to ensure that the groundwater and surface water quality is not adversely impacted due to the project & its activities.
5. The treated effluents emanating from the different processes such as DM plant, boiler blow down, ash pond/dyke, sewage, etc. conforming to the prescribed standards shall be re-circulated and reused. Sludge/ rejects will be disposed in accordance with the Hazardous Waste Management Rules.

6. Hot water dispensed from the condenser should be adequately cooled to ensure the temperature of the released surface water is not more than 5 degrees Celsius above the temperature of the intake water.
7. Wastewater generation of 32040 KLD from various sources (viz. cooling tower blowdown, boiler blow down, wastewater from ash handling, etc) shall be treated to meet the standards of pH: 6.5-8.5; Total Suspended Solids: 100 mg/l; Oil & Grease: 20 mg/l; Copper: 1 mg/l; Iron:1 mg/l; Free Chlorine: 0.5; Zinc: 1.0 mg/l; Total Chromium: 0.2 mg/l; Phosphate: 5.0 mg/l.
8. Sewage generation of 576 KLD will be treated by setting up Sewage Treatment plant to maintain the treated sewage characteristics of pH: 6.5-9.0; Bio-Chemical Oxygen Demand (BOD): 30 mg/l; Total Suspended Solids: 100 mg/l; Fecal Coliforms (Most Probable Number).
9. Action plan by the TPPs located within 50 km of a municipality or any Urban Local Body (ULB) to use the treated sewage water produced by the municipality/Urban Local Body(ULB) to reduce fresh water consumption shall be submitted.

G. Risk Mitigation and Disaster Management:

1. Adequate safety measures and environmental safeguards shall be provided in the plant area to control spontaneous fires in coal yard, especially during dry and humid season.
2. Storage facilities for auxiliary liquid fuel such as LDO and HFO/LSHS shall be made as per the extant rules in the plant area in accordance with the directives of Petroleum & Explosives Safety Organisation (PESO). Sulphur Content in the liquid fuel should not exceed 0.5%.
3. Ergonomic working conditions with First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
4. Safety management plan based on Risk Assessment shall be prepared to limit the risk exposure to the workers within the plant boundary.
5. Regular mock drills for on-site emergency management plan and Integrated Emergency Response System shall be developed for all kind of possible disaster situations.

H. Green belt and Biodiversity conservation:

1. Green belt shall be developed in an area of 33% of the total plant area with indigenous native tree species in accordance with CPCB guidelines. The green belt shall inter-alia cover an entire periphery of the plant.
2. In-situ/ex-situ Conservation Plan for the conservation of flora and fauna should be prepared and implemented.

I. Waste management:

1. Solid waste management should be planned in accordance with extant Solid Waste Management Rules, 2016.
2. Toxicity Characteristic Leachate Procedure (TCLP) test shall be conducted for any substance, potential of leaching heavy metals into the surrounding areas as well as into the groundwater.
3. Ash pond shall be lined with impervious liner as per the soil conditions. Adequate dam/dyke safety measures shall also be implemented to protect the ash dyke from getting breached.
4. Fly ash shall be collected in dry form and ash generated shall be used in phased manner as per provisions of the Notification on Ash Utilization issued by the Ministry S.O. 5481 dated 31.12.2021, S.O.6169 (E) dated 30.12.2021, S.O.05 (E) dated 01.01.2024 and amendment thereto.
5. Unutilized ash if any shall be disposed off in the ash pond in the form of High Concentration Slurry method.

J. Monitoring of compliance:

1. Environmental Audit of the project be taken up by the third party for preparation of Environmental Statement as per Form-V & Conditions stipulated in the EC and report be submitted to the Ministry.

2. Resettlement & Rehabilitation Plan as per the extant rules of Govt. of India and respective State Govt. shall be followed, if applicable.
3. Energy Conservation Plan to be implemented as envisaged in the EIA / EMP report. Renewable Energy Purchase Obligation as set by MoP/State Government shall be met either by establishing renewable energy power plant (such as solar, wind, etc.) or by purchasing Renewable Energy Certificates.
4. Energy and Water Audit shall be conducted at least once in two years and recommendations arising out of the Report should be followed. A report in this regard shall be submitted to Ministry's Regional Office.
5. The project proponent shall (Post-EC Monitoring):
   a. Send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government;
   b. Upload the clearance letter on the web site of the company as a part of information to the general public.
   c. Inform the public through advertisement within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forest and Climate Change (MoEF&CC) at http://parviesh.nic.in.
   d. Upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same periodically;
   e. Monitor the criteria pollutants level namely; PM (PM10 & PM2.5 in case of ambient AAQ), SO2, Nox (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company;
   f. Submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB;
   g. Submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company;
   h. Inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project and the date of commencement of the land development work.

K. Corporate Environmental Responsibility (CER) activities:

1. CER activities will be carried out as per Ministry's OM F.No.22- 65/2017- IA.III dated 30th September, 2020 and 22-65/2017- IA.III dated 25.02.2021 or as proposed by the PP in reference to Public Hearing or as earmarked in the EIA/EMP report along with the detailed scheduled of implementation with appropriate budgeting.

Agenda No. 28.8

28.8 Proposed 4x800 MW Coal Based Ultra Super Critical Thermal Power Plant (USCTPP) **by M/s Anuppur Thermal Energy (MP) Private Limited** located at Villages Chhatai, Majhtoliya & Umarda, Tehsil Kotma, **District Anuppur**, **Madhya Pradesh - Environmental Clearance-regarding.**

[Proposal No. IA/MP/THE/543505/2025; F.No. J-13012/144/2010-IA-II(T)]

28.8.1: M/s. Anuppur Thermal Energy (MP) Private Ltd., a subsidiary of Adani Power Limited, has made an online application vide proposal no. IA/MP/THE/543505/2025 dated 12.07.2025 along with copy of EIA/EMP report, Form seeking Environment Clearance (EC) under the provisions of the EIA

Notification, 2006 for the project mentioned above. The proposed project activity is listed at item no. 1(d) Under Category "A" of the schedule of the EIA Notification, 2006 and appraised at Central Level. The project do not attract the provisions of general condition of the EIA Notification, 2006.

Name of the EIA consultant: M/s Gaurang Environmental Solutions Pvt. Ltd. Certificate No. NABET/EIA/2326/RA 0338 Valid up to: 07.12.2026.

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

28.8.2: The Project Site for instant proposal was earlier accorded Environmental Clearance (EC) was granted by the MoEF&CC, New Delhi vide File no. J 13012/144/2010-IA. II (T) dated 27.11.2012 to M/s Welspun Energy Anuppur Pvt. Ltd. for 1320 (2x660) MW Thermal Power Plant. Subsequently, M/s Welspun Energy Anuppur Pvt. Ltd. had obtained Consent to Establish (CTE) from Madhya Pradesh Pollution Control Board (MPPCB) vide letter dated 18.07.2013. Further, the MoEF&CC issued Transfer of Environmental Clearance to Anuppur Thermal Energy (MP) Private Ltd (ATEMPPL) & validity extension up to 26.11.2022, New Delhi vide letter No. F. No: J-13012/144/2010-IA. II(T) dated 07.01.2020. There is no activity undertaken at the site except the boundary wall construction. The validity of the EC lapsed on 26/11/2023. Now the configuration has changed from 2x660 MW to 4x800 MW in an area of 371 and de-novo EC process has been initiated.

28.8.3: The project of M/s Anuppur Thermal Energy (MP) Private Ltd located at Village Chhatai, Majhtoliya and Umarda, Tehsil Kotma, District Anuppur, Madhya Pradesh, is for setting up a new power plant with a capacity of 4x800 MW (Coal Based Ultra-Super Critical Technology).

28.8.4: Status of installation of Flue Gas Desulphurization shall be furnished as per the MoEF&CC Notification dated 11/07/2025:

v. Categorization details of TPP: Anuppur TPP falls under the **Category 'C'** as per CPCB categorization with respect to FGD installation.
vi. Sulfur content of the coal to be fired in the boiler: **<0.5%**
vii. Status of FGD installation for existing unit: **Not applicable.**
viii. Action plan for installation of new stack in compliance to the notification number GSR 742 (E) dated the 30/08/1990 for the proposed project: As per MoEFCC notification dated 11.07.2025, two numbers of 275 meters high Chimney (Twin flue) is proposed and proponent will abide by and adhere to all the Notifications/ Directives issued by the MoEFCC from time to time regarding the TPP.

28.8.5: The detail of the ToR is furnished as below:

Proposal No with date	Consideration	Details	Date of accord	ToR Validity
IA/MP/THE/495356/2024 Dated – 19.09.2024	13th meeting of EAC held on 01.10.2024	**Terms of Reference**	**28.10.2024**	**30.10.2028**

28.8.6: Environmental site settings

S. No.	Particulars	Details	Remarks
1.	Total land	371 ha [Private: 312 ha; Govt.:- 59 ha; Agriculture --Nil;]	Land use:

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td></td><td>Industrial
(The land is in possession of company & is barren)</td></tr>
<tr><td>2.</td><td>Land use break up</td><td>
<table>
<tr><th>Facilities</th><th>Total Area (In Hectares)</th></tr>
<tr><td>Main Plant</td><td>85</td></tr>
<tr><td>Coal Handling System</td><td>73</td></tr>
<tr><td>Water System</td><td>30</td></tr>
<tr><td>Switch Yard</td><td>NIL*</td></tr>
<tr><td>Green belt</td><td>123</td></tr>
<tr><td>Roads</td><td>NIL*</td></tr>
<tr><td>Township</td><td>13</td></tr>
<tr><td>Ash pond</td><td>47</td></tr>
<tr><td>Railway Siding</td><td>Not envisaged. Wagon Tippler/ Track hopper facility will be provided within the Plant</td></tr>
<tr><td>Water Supply Pipeline</td><td>Water Source from Sone River, about 46.2 Km from Plant boundary</td></tr>
<tr><td>Ash Transport Pipeline</td><td>NIL*</td></tr>
<tr><td>Others</td><td>---</td></tr>
<tr><td>Total</td><td>371 Ha.</td></tr>
<tr><td colspan="2">*Included in Main Plant Area</td></tr>
</table>
</td><td>--</td></tr>
<tr><td>3.</td><td>Land acquisition details as per MoEF&CC O.M, dated 7/10/2014</td><td>The land is already in possession with Anuppur TPP.</td><td>Land Documents are submitted along with EC application.</td></tr>
<tr><td>4.</td><td>Existence of habitation& involvement of R&R, if any.</td><td><u>Project site</u>: Name of village (if any): No R&R.
Study Area: As Below
<table>
<tr><th>Habitation / vilage</th><th>Distance (Km)</th><th>Direction</th></tr>
<tr><td>Umarda</td><td>0.3</td><td>East</td></tr>
<tr><td>Chhatai</td><td>0.3</td><td>North</td></tr>
<tr><td>Majhauli</td><td>0.3</td><td>ESE</td></tr>
<tr><td>Mantolia</td><td>0.5</td><td>East</td></tr>
<tr><td>Tarasilli</td><td>0.5</td><td>South</td></tr>
<tr><td>Gulidand</td><td>1.2</td><td>SW</td></tr>
<tr><td>Kothi</td><td>1.6</td><td>SW</td></tr>
<tr><td>Jaratola</td><td>3.1</td><td>NW</td></tr>
<tr><td>Khamroudh</td><td>3.3</td><td>SW</td></tr>
</table>
</td><td>R&R Not applicable/ not involved.</td></tr>
<tr><td>5</td><td>Existence of school and hospital if any.</td><td><u>C. School</u>
Project site: NIL
Study Area: As below
<table>
<tr><th>School</th><th>Distance (Km)</th><th>Direction</th></tr>
<tr><td>Government Middle School, Gulidand</td><td>1.2</td><td>S</td></tr>
<tr><td>Government Higher Secondary School,</td><td>1.28</td><td>SE</td></tr>
</table>
</td><td></td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>Kothi</td><td></td><td></td></tr>
</table>
<u>D. Hospital</u>
Project site: NIL
Study Area: As below
<table>
<tr><th>School</th><th>Distance (Km)</th><th>Direction</th></tr>
<tr><td>Primary Hospital Kothi</td><td>1.90</td><td>S</td></tr>
<tr><td>Community Health Centre, Kothi</td><td>3.39</td><td>S</td></tr>
</table>
</td><td></td></tr>
<tr><td>6.</td><td>Latitude and Longitude of <u>all corners</u> of the project site.</td><td>C. Plant site
<table>
<tr><th>S. No.</th><th>Latitude</th><th>Longitude</th><th>S. No.</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>1.</td><td>23°22'19.89"N</td><td>82° 1'53.98"E</td><td>58.</td><td>23°21'19.89"N</td><td>82° 2'56.84"E</td></tr>
<tr><td>2.</td><td>23°22'18.06"N</td><td>82° 2'0.52"E</td><td>59.</td><td>23°21'20.21"N</td><td>82° 2'55.86"E</td></tr>
<tr><td>3.</td><td>23°22'12.97"N</td><td>82° 2'0.45"E</td><td>60.</td><td>23°21'19.94"N</td><td>82° 2'55.24"E</td></tr>
<tr><td>4.</td><td>23°22'13.67"N</td><td>82° 2'4.48"E</td><td>61.</td><td>23°21'20.16"N</td><td>82° 2'53.46"E</td></tr>
<tr><td>5.</td><td>23°22'8.45"N</td><td>82° 2'12.47"E</td><td>62.</td><td>23°21'21.78"N</td><td>82° 2'49.36"E</td></tr>
<tr><td>6.</td><td>23°22'4.50"N</td><td>82° 2'17.58"E</td><td>63.</td><td>23°21'20.28"N</td><td>82° 2'46.78"E</td></tr>
<tr><td>7.</td><td>23°22'8.82"N</td><td>82° 2'20.22"E</td><td>64.</td><td>23°21'22.93"N</td><td>82° 2'46.03"E</td></tr>
<tr><td>8.</td><td>23°22'8.77"N</td><td>82° 2'21.31"E</td><td>65.</td><td>23°21'22.44"N</td><td>82° 2'44.66"E</td></tr>
<tr><td>9.</td><td>23°22'5.89"N</td><td>82° 2'29.35"E</td><td>66.</td><td>23°21'24.60"N</td><td>82° 2'43.06"E</td></tr>
<tr><td>10.</td><td>23°22'4.47"N</td><td>82° 2'36.33"E</td><td>67.</td><td>23°21'26.67"N</td><td>82° 2'44.74"E</td></tr>
<tr><td>11.</td><td>23°22'5.47"N</td><td>82° 2'37.69"E</td><td>68.</td><td>23°21'27.33"N</td><td>82° 2'39.68"E</td></tr>
<tr><td>12.</td><td>23°22'5.68"N</td><td>82° 2'38.70"E</td><td>69.</td><td>23°21'29.96"N</td><td>82° 2'37.04"E</td></tr>
<tr><td>13.</td><td>23°22'7.07"N</td><td>82° 2'38.80"E</td><td>70.</td><td>23°21'31.14"N</td><td>82° 2'33.79"E</td></tr>
<tr><td>14.</td><td>23°22'8.22"N</td><td>82° 2'42.45"E</td><td>71.</td><td>23°21'33.86"N</td><td>82° 2'29.44"E</td></tr>
<tr><td>15.</td><td>23°22'12.24"N</td><td>82° 2'44.21"E</td><td>72.</td><td>23°21'35.33"N</td><td>82° 2'23.91"E</td></tr>
<tr><td>16.</td><td>23°22'15.22"N</td><td>82° 2'48.91"E</td><td>73.</td><td>23°21'34.04"N</td><td>82° 2'17.00"E</td></tr>
<tr><td>17.</td><td>23°22'15.91"N</td><td>82° 2'49.28"E</td><td>74.</td><td>23°21'34.90"N</td><td>82° 2'12.77"E</td></tr>
<tr><td>18.</td><td>23°22'15.64"N</td><td>82° 2'50.28"E</td><td>75.</td><td>23°21'40.38"N</td><td>82° 2'11.95"E</td></tr>
<tr><td>19.</td><td>23°22'20.34"N</td><td>82° 2'52.56"E</td><td>76.</td><td>23°21'42.33"N</td><td>82° 2'7.24"E</td></tr>
<tr><td>20.</td><td>23°22'5.23"N</td><td>82° 3'34.52"E</td><td>77.</td><td>23°21'44.50"N</td><td>82° 2'8.44"E</td></tr>
<tr><td>21.</td><td>23°22'3.48"N</td><td>82° 3'34.48"E</td><td>78.</td><td>23°21'45.08"N</td><td>82° 2'7.30"E</td></tr>
<tr><td>22.</td><td>23°22'0.29"N</td><td>82° 3'32.98"E</td><td>79.</td><td>23°21'44.16"N</td><td>82° 2'6.23"E</td></tr>
<tr><td>23.</td><td>23°21'56.30"N</td><td>82° 3'32.35"E</td><td>80.</td><td>23°21'45.19"N</td><td>82° 2'4.18"E</td></tr>
<tr><td>24.</td><td>23°21'55.70"N</td><td>82° 3'33.77"E</td><td>81.</td><td>23°21'48.04"N</td><td>82° 2'5.49"E</td></tr>
<tr><td>25.</td><td>23°21'54.47"N</td><td>82° 3'33.76"E</td><td>82.</td><td>23°21'49.00"N</td><td>82° 2'4.86"E</td></tr>
<tr><td>26.</td><td>23°21'54.53"N</td><td>82° 3'33.15"E</td><td>83.</td><td>23°21'47.49"N</td><td>82° 2'3.08"E</td></tr>
<tr><td>27.</td><td>23°21'51.71"N</td><td>82° 3'32.75"E</td><td>84.</td><td>23°21'49.11"N</td><td>82° 2'2.37"E</td></tr>
<tr><td>28.</td><td>23°21'51.61"N</td><td>82° 3'31.76"E</td><td>85.</td><td>23°21'48.80"N</td><td>82° 2'1.83"E</td></tr>
<tr><td>29.</td><td>23°21'51.82"N</td><td>82° 3'30.40"E</td><td>86.</td><td>23°21'49.86"N</td><td>82° 2'1.59"E</td></tr>
<tr><td>30.</td><td>23°21'49.22"N</td><td>82° 3'29.72"E</td><td>87.</td><td>23°21'53.00"N</td><td>82° 1'52.86"E</td></tr>
<tr><td>31.</td><td>23°21'48.72"N</td><td>82° 3'30.55"E</td><td>88.</td><td>23°21'42.58"N</td><td>82° 1'48.69"E</td></tr>
<tr><td>32.</td><td>23°21'42.81"N</td><td>82° 3'27.66"E</td><td>89.</td><td>23°21'53.85"N</td><td>82° 1'31.53"E</td></tr>
<tr><td>33.</td><td>23°21'40.89"N</td><td>82° 3'29.54"E</td><td>90.</td><td>23°21'55.12"N</td><td>82° 1'32.50"E</td></tr>
<tr><td>34.</td><td>23°21'39.63"N</td><td>82° 3'28.83"E</td><td>91.</td><td>23°21'54.15"N</td><td>82° 1'36.08"E</td></tr>
<tr><td>35.</td><td>23°21'41.37"N</td><td>82° 3'25.84"E</td><td>92.</td><td>23°21'52.21"N</td><td>82° 1'36.17"E</td></tr>
<tr><td>36.</td><td>23°21'38.58"N</td><td>82° 3'24.36"E</td><td>93.</td><td>23°21'48.90"N</td><td>82° 1'39.79"E</td></tr>
<tr><td>37.</td><td>23°21'37.44"N</td><td>82° 3'27.10"E</td><td>94.</td><td>23°21'47.74"N</td><td>82° 1'41.95"E</td></tr>
<tr><td>38.</td><td>23°21'36.93"N</td><td>82° 3'26.95"E</td><td>95.</td><td>23°21'49.86"N</td><td>82° 1'44.35"E</td></tr>
<tr><td>39.</td><td>23°21'36.83"N</td><td>82° 3'27.15"E</td><td>96.</td><td>23°21'51.56"N</td><td>82° 1'39.11"E</td></tr>
<tr><td>40.</td><td>23°21'32.43"N</td><td>82° 3'26.01"E</td><td>97.</td><td>23°21'54.19"N</td><td>82° 1'39.55"E</td></tr>
<tr><td>41.</td><td>23°21'32.22"N</td><td>82° 3'26.80"E</td><td>98.</td><td>23°21'56.92"N</td><td>82° 1'44.14"E</td></tr>
</table>
</td><td></td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>42.</td><td>23°21'31.91"N</td><td>82° 3'26.71"E</td><td>99.</td><td>23°22'0.54"N</td><td>82° 1'45.80"E</td></tr>
<tr><td>43.</td><td>23°21'33.07"N</td><td>82° 3'22.52"E</td><td>100.</td><td>23°22'1.50"N</td><td>82° 1'43.22"E</td></tr>
<tr><td>44.</td><td>23°21'33.25"N</td><td>82° 3'14.24"E</td><td>101.</td><td>23°22'1.21"N</td><td>82° 1'42.99"E</td></tr>
<tr><td>45.</td><td>23°21'31.80"N</td><td>82° 3'13.50"E</td><td>102.</td><td>23°22'4.81"N</td><td>82° 1'31.83"E</td></tr>
<tr><td>46.</td><td>23°21'31.88"N</td><td>82° 3'13.28"E</td><td>103.</td><td>23°22'10.46"N</td><td>82° 1'35.06"E</td></tr>
<tr><td>47.</td><td>23°21'31.32"N</td><td>82° 3'12.93"E</td><td>104.</td><td>23°22'13.91"N</td><td>82° 1'35.80"E</td></tr>
<tr><td>48.</td><td>23°21'31.88"N</td><td>82° 3'11.90"E</td><td>105.</td><td>23°22'13.16"N</td><td>82° 1'36.86"E</td></tr>
<tr><td>49.</td><td>23°21'30.46"N</td><td>82° 3'10.80"E</td><td>106.</td><td>23°22'14.27"N</td><td>82° 1'37.84"E</td></tr>
<tr><td>50.</td><td>23°21'30.24"N</td><td>82° 3'11.27"E</td><td>107.</td><td>23°22'11.44"N</td><td>82° 1'41.35"E</td></tr>
<tr><td>51.</td><td>23°21'28.12"N</td><td>82° 3'10.50"E</td><td>108.</td><td>23°22'14.90"N</td><td>82° 1'44.12"E</td></tr>
<tr><td>52.</td><td>23°21'26.05"N</td><td>82° 3'13.76"E</td><td>109.</td><td>23°22'14.29"N</td><td>82° 1'45.66"E</td></tr>
<tr><td>53.</td><td>23°21'20.90"N</td><td>82° 3'8.64"E</td><td>110.</td><td>23°22'10.30"N</td><td>82° 1'42.41"E</td></tr>
<tr><td>54.</td><td>23°21'20.65"N</td><td>82° 3'6.57"E</td><td>111.</td><td>23°22'8.86"N</td><td>82° 1'44.78"E</td></tr>
<tr><td>55.</td><td>23°21'21.91"N</td><td>82° 3'1.50"E</td><td>112.</td><td>23°22'14.37"N</td><td>82° 1'47.90"E</td></tr>
<tr><td>56.</td><td>23°21'19.82"N</td><td>82° 3'0.83"E</td><td>113.</td><td>23°22'13.88"N</td><td>82° 1'48.76"E</td></tr>
<tr><td>57.</td><td>23°21'20.19"N</td><td>82° 2'56.99"E</td><td>114.</td><td>23°22'17.63"N</td><td>82° 1'52.58"E</td></tr>
</table>
B. Ash pond
<table>
<tr><th>S.NO.</th><th>LATITUDE</th><th>LONGITUDE</th></tr>
<tr><td>1</td><td>23°22'8.01"N</td><td>82° 2'8.31"E</td></tr>
<tr><td>2</td><td>23°21'53.09"N</td><td>82° 1'56.73"E</td></tr>
<tr><td>3</td><td>23°21'54.00"N</td><td>82° 1'51.94"E</td></tr>
<tr><td>4</td><td>23°21'45.12"N</td><td>82° 1'47.54"E</td></tr>
<tr><td>5</td><td>23°21'47.28"N</td><td>82° 1'44.05"E</td></tr>
<tr><td>6</td><td>23°21'49.91"N</td><td>82° 1'46.00"E</td></tr>
<tr><td>7</td><td>23°21'52.79"N</td><td>82° 1'41.60"E</td></tr>
<tr><td>8</td><td>23°22'0.70"N</td><td>82° 1'47.35"E</td></tr>
<tr><td>9</td><td>23°22'6.06"N</td><td>82° 1'34.37"E</td></tr>
<tr><td>10</td><td>23°22'11.83"N</td><td>82° 1'37.48"E</td></tr>
<tr><td>11</td><td>23°22'7.99"N</td><td>82° 1'44.74"E</td></tr>
<tr><td>12</td><td>23°22'17.31"N</td><td>82° 1'54.39"E</td></tr>
<tr><td>13</td><td>23°22'16.74"N</td><td>82° 1'58.26"E</td></tr>
<tr><td>14</td><td>23°22'12.15"N</td><td>82° 1'59.10"E</td></tr>
</table>
</td><td></td></tr>
<tr><td>7.</td><td>Elevation of the project site</td><td>Average site elevation (AMSL):
TPP: 562 m, Ash Dyke: 565 m</td><td></td></tr>
<tr><td>8.</td><td>Involvement of Forest land if any.</td><td>Nil</td><td>NOC has been issued for no involvement of forest land by DFO,Forest Division, Anuppur vide letter no. kramank / Ma.Chi. / 2025 / 3242 dated 22.05.2025</td></tr>
<tr><td>9.</td><td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists</td><td>Study area:
<table>
<tr><th>Particulars</th><th>Distance (in km)</th><th>Direction</th></tr>
<tr><td>Kewai river</td><td>0.07</td><td>W</td></tr>
<tr><td>Koki Nala</td><td>0.75</td><td>W</td></tr>
</table>
</td><td>HFL letter from WRD received. The HFL of Kewai River is 538.50 meters</td></tr>
</table>

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td></td><td>within the project site as well as study area</td><td>
<table>
<tr><td>Barne Nadi</td><td>1.40</td><td>N</td></tr>
<tr><td>Katambar Nadi</td><td>3.70</td><td>ENE</td></tr>
<tr><td>Latura Nala</td><td>4.00</td><td>SSE</td></tr>
<tr><td>Kharla Nala</td><td>6.20</td><td>NNW</td></tr>
<tr><td>Mariyakachhar Nadi</td><td>6.60</td><td>NW</td></tr>
<tr><td>Thadaghat Nala</td><td>7.35</td><td>NE</td></tr>
<tr><td>Chaudhar Nala</td><td>7.60</td><td>WSW</td></tr>
<tr><td>Kanai Nala</td><td>8.20</td><td>S</td></tr>
<tr><td>Jilodhar Nala</td><td>8.90</td><td>NW</td></tr>
<tr><td>Dhodiya Nala</td><td>9.20</td><td>NW</td></tr>
<tr><td>Baniya Nadi</td><td>9.40</td><td>WNW</td></tr>
</table>
**Source: - All distances are taken with respect to S.O.I. Toposheet, which is pertinent to this project.*

The Kewai River flows at a distance of approximately 70 meters west (as per DSS) of the proposed Anuppur Thermal Power Project site. As required by MoEF&CC O.M. dated 14.02.2022, the HFL certificate from WRD, Anuppur received. HFL of Kewai River is 538.5m (MSL) whereas proposed project Site elevation is 562m (MSL) which is substantially higher elevation.
In compliance with the siting criteria and to ensure the ecological integrity of the river, the project layout has been designed outside the HFL influence zone and includes a greenbelt buffer along the riverbank. A detailed river conservation action plan will be adopted, which includes:
• Maintaining a safe setback distance from the river edge.
• Plantation of native species to stabilize the riverbank.
• Avoiding any discharge or obstruction in the natural flow of the river.
• Regular monitoring of surface water quality.</td><td></td></tr>
<tr><td>10.</td><td>Existence of ESZ/ESA/ national park/ wildlife sanctuary/ biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area</td><td><u>Study area</u>
Name of the ESZ/ESA: NA
Status of Notification: NA
Distance of project from ESZ/ESA: NA
Authenticated map of ESZ projecting distance of ESZ from project site: NA
Status of NBWL approval: NA
List of Reserved and protected forests:
<table>
<tr><th>Particulars</th><th>Distance (In km)</th><th>Direction</th></tr>
<tr><td colspan="3">Reserve Forest (R.F), Protected Forest (P.F)</td></tr>
<tr><td>Nandlal Patera R. F.</td><td>1.10</td><td>E</td></tr>
<tr><td>Gundur P. F.</td><td>3.65</td><td>ENE</td></tr>
<tr><td>Dehuli R.F.</td><td>5.65</td><td>NNE</td></tr>
<tr><td>Mahora R.F.</td><td>7.6</td><td>WSW</td></tr>
<tr><td>Rukra R.F.</td><td>7.70</td><td>E</td></tr>
<tr><td>Kelhari P.F.</td><td>7.90</td><td>N</td></tr>
</table></td><td></td></tr>
</table>

S. No.	Particulars	Details	Remarks
		No National Park, Sanctuary, Elephant/Tiger Reserve, or migratory routes/wildlife corridor exists within 10 km of the TPP. NOC from Forest Department, Anuppur has been obtained vide Letter no. kramank / Ma.Chi. / 2025 / 3244 dated 22.05.2025 state that the project does not impact any Wildlife Corridor.	
11.	Archaeological sites monuments/ historical temples etc.	**There are no Archaeological sites present within study area.**	
12.	Facility envisaged in CRZ area (Only for coastal power plant)	**Name of the facility in CRZ area** – NA **Recommendations of CZMA** – NA **Status of CRZ clearance – NA**	
13.	Involvement of Critically Polluted Area/Severely Polluted area as per 2018 CEPI score	**Involvement of CPA/SPA:** - NA **Proximity to CPA/SPA:** - NA	There is no CPA/SPA as per CPCB Index.

28.8.7: The unit configuration and capacity of proposed project is given as below:

Sr. No.	Existing power plant configuration and capacity	Proposed power plant configuration and capacity	Total	Technology adopted
1	**NA**	**(4x800) MW**	**3200 MW**	Ultra Super Critical

28.8.8: The details of the fuel (Coal/LDO) requirement for the proposed project along with its source and mode of transportation is given as below:

Details	Fuel requirement (MTPA)	Source	Distance from site (Kms)	Mode of Transportation	Coal characteristics (Worst case scenario)	Linkage document
Coal	13.3 (85% PLF)	Mara II Mahan Coal Mine, Gondbahera Ujheni, East Coal Mine & E-Auction.	Within 250 Km	Rail	Ash <40 (%) Sulphur <0.5 (%) Moisture-13 (%) GCV - 3700-4300 Kcal/Kg	FSA and E-auction
LDO/ HSD	25000 KL per Annum	Local Market/Vendors	Approx. 25-30 Km	Road	Low Sulphur (3-5% mass)	Local Vendors

28.8.9: The water requirement for the proposed project is estimated as 1,53,425 m^3/day (56 MCM), freshwater requirement will be met from the Sone River. The permission for drawl ~~groundwater~~ / **surface water** is obtained from WRD Vide Lr. No. पत्र क्र.वृ.प.नि.मं./31/तक/रा.स्त.-225/2010/49 dated 21.01.2025. The water will be supplied/transported to the plant site through the water pipeline. The specific water consumption for the proposed power plant will be <2.5 m^3/MWhr.

28.8.10: The power requirement for the proposed project is estimated as 7.5 MW during construction phase and will be obtained from nearby Sub-station.

28.8.11: Baseline Environmental Studies

<table>
<tr><th>Period</th><th colspan="3">October' 2024 to December 2024</th><th>Addition study (if any)</th></tr>
<tr><td>AAQ parameters at 12 Locations (min and max)</td><td colspan="3"><table><tr><th>Parameter</th><th>Min (µg/m³)</th><th>Max (µg/m³)</th></tr><tr><td>PM 10</td><td>37.3</td><td>66</td></tr><tr><td>PM 2.5</td><td>21</td><td>50</td></tr><tr><td>SO2</td><td>2.2</td><td>10.7</td></tr><tr><td>NOx</td><td>2.2</td><td>11.7</td></tr><tr><td>CO</td><td>0.05</td><td>0.45</td></tr></table></td><td>--</td></tr>
<tr><td>Incremental GLC level</td><td colspan="3">PM 10= Max. GLC: 0.499 µg/m³ at 0.75 km in ESE direction
SO2 = Max GLC: 10.23 µg/m³ at 0.75 km in ESE direction
NOx = Max GLC: 3.26 µg/m³ at 0.75 km in ESE direction
Note:
• High Efficiency Electrostatic Precipitator (ESP) is proposed to install to meet PM emission as per the norms.
• For SO2, 275m high Chimney is proposed. MoEFCC Notification dated 11.07.2025 shall be followed.
• SCR/SOFA with low NOx burner to meet NOx emission as per the norms.</td><td>--</td></tr>
<tr><td>Ground water quality at 20 locations</td><td colspan="3">pH: 6.69 to 7.79, total Hardness (as CaCO3): 122mg/l – 302 mg/l; Chlorides: 56 mg/l – 192 mg/l; Fluoride: BDL (DL-0.1)/mg/l; Heavy metals like Copper (as Cu) - BLQ(LOQ-0.01), Lead (as Pb) - BLQ(LOQ- 0.005), Cadmium (as Cd) - BLQ(LOQ-0.001), Chromium (as Cr) - BLQ(LOQ-0.001), Arsenic (as As)- BLQ(LOQ-0.001) and Mercury(as Hg)- BLQ(LOQ-0.001).</td><td>--</td></tr>
<tr><td>Surface water quality at 05 locations</td><td colspan="3">pH 7.84 to 8.12, Dissolved Oxygen: 6.2 to 6.7 mg/lit; BOD:3-12 mg/L; COD:18-62 mg/l</td><td>--</td></tr>
<tr><td>Effluent generation details and its treatment</td><td colspan="3">• Wastewater generation from TPP about 2125 KLD
• Mode of treatment & reuse – The wastewater will be treated in ETP 2400 KLD (Neutralization & Equalization) and treated wastewater will be utilized within the plant to achieve Zero Liquid discharge.
• Domestic wastewater, 22 KLD will be treated through STP 30 KLD having MBBR Technology.
• Mode of treatment & reuse - Treated water will be utilized for greenbelt and plantation purpose.</td><td>The project is based on Zero Liquid Discharge (ZLD).</td></tr>
<tr><td>Noise levels Leq</td><td colspan="3">The Leq values for day time was observed to be 41.9 to 54.5 dB (A), while during night time 36.6 to 44.1 dB (A).</td><td>--</td></tr>
</table>

<table>
<tr><th>Period</th><th>October' 2024 to December 2024</th><th>Addition study (if any)</th></tr>
<tr><td>(Day and Night) at 12 locations</td><td></td><td></td></tr>
<tr><td>Traffic assessment study findings</td><td>

Traffic study has been conducted for one month.
Traffic study has been conducted at SH-8 and nearby village road which is approximately 5 Km (distance) and adjacent to the project site respectively connecting the plant site.
Considering 70-80% of the ash to be transported through railway, incremental load will be 181 vehicles/ day i.e. 815 PCU/day
Also, the existing road will be strengthened and thus, the capacity of the road will also be enhanced.

Existing level of service (LOS) is A.
<table>
<tr><th>Road</th><th>Volume (in PCU/Day)</th><th>Capacity (in PCU/Day)</th><th>Existing V/C Ratio</th><th>LOS</th><th>Performance</th></tr>
<tr><td>SH 8</td><td>569.5</td><td>15000</td><td>0.0379</td><td>A</td><td>Excellent</td></tr>
<tr><td>Village Road</td><td>455.5</td><td>6000</td><td>0.0759</td><td>A</td><td>Excellent</td></tr>
</table>
Modified LoS (after proposed project) is calculated as under:
<table>
<tr><th rowspan="2">Road</th><th rowspan="2">Existing LOS</th><th colspan="4">Changed V/C and LOS after adding generated traffic from operational phase of proposed project</th></tr>
<tr><th>Increased V</th><th>C</th><th>V/C</th><th>Modified LOS</th></tr>
<tr><td>Village road</td><td>A 'Excellent'</td><td>455.5 + 815 = 1270.5 say 1271</td><td>15,000</td><td>0.084</td><td>A</td></tr>
<tr><td>S.H. 8</td><td>A 'Excellent'</td><td>569.5 + 815 = 1384.5 say 1385</td><td>15,000</td><td>0.092</td><td>A</td></tr>
</table>

Conclusion: Thus, it can be inferred that LoS of the roads will not change from current LOS and thus, the impact can be considered as marginal

</td><td>--</td></tr>
<tr><td>Soil Quality at 12 Locations</td><td>pH range 7.38 to 7.62; Electrical conductivity (EC); 190 to 240 mhos/cm; Calcium: 74 to 126 mg/kg; Sodium:72 to 118.7mg/kg; potassium: 158 to 188 mg/kg; Nitrogen: 10.2 to 13.4 mg/kg; Phosphorous: 11.4 to 13.5 mg/kg; Cation Exchange Capacity (CEC): 1.3 to 2.4 meg/100gm; Magnesium: 30 to 43 mg/kg; Organic Matter: 0.75% to 0.86 %</td><td>--</td></tr>
<tr><td>Flora and fauna</td><td>16 Schedule I Species found in the buffer zone during field survey and secondary sources. Of 16 Schedule I Species, 9 are mammals, 4 are avifauna and 3 herpeto-fauna.</td><td>The List of Flora & Fauna is duly certified by DFO, Forest Division,Anuppur vide letter no. kramank / Ma.Chi. / 2025 /</td></tr>
</table>

<table>
<tr><th>Period</th><th colspan="3">October’ 2024 to December 2024</th><th>Addition study (if any)</th></tr>
<tr><td></td><td colspan="3"></td><td>3246 dated 22.05.2025. Wildlife Conservation Plan has been prepared and submitted for further approval from Forest office.</td></tr>
<tr><td>Hydrogeology study</td><td colspan="3">The action plan to address the recommendation of the Hydrogeology report and Watershed management plan are as below:
<table><tr><th>Sl. NO</th><th>NIT Recommendations</th><th>Action Plan</th></tr><tr><td>1</td><td>Since, the maximum TDS value found at WS-6 village was found to be above the acceptable TDS limit, it is recommended to monitor the TDS levels to prevent degradation of groundwater quality and problems due to scaling in the plant's operations.</td><td>Water quality monitoring shall be done once a month, which includes WS-6 village, through NABL accredited laboratory to monitor TDS level.
Also, TPP is based on Zero Liquid Discharge (ZLD).</td></tr><tr><td>2</td><td>As the value of total hardness as CaCO3 in WS-7groundwater sample was found to be more than acceptable limit (200 mg/l), it is suggested to ensure regular monitoring and testing of groundwater in order to track any changes hardness levels.</td><td>Ground Water quality monitoring shall be sone once in a month engaging NABL accredited laboratory to track any changes in hardness as $CaCO_3$ content.</td></tr><tr><td>3</td><td>Since some groundwater samples (WS-6, 7, 8, 9, 15, and 16) exceed the acceptable sulphate limit of 200 mg/L but remain below the permissible limit of 400 mg/L, it is recommended to implement proper measures for</td><td>Anuppur TPP will initiate a routine water quality monitoring program, with monthly sampling and analysis of sulphate and associated parameters through NABL accredited laboratory and corrective/preventive actions will be taken based on findings in the report.
In addition to the above, Anuppur TPP shall be using Surface water and ZLD will be Implemented</td></tr></table></td><td>Consultant details:
The hydrogeology study report has been prepared by M/s. Akshar Geo Services Pvt. Ltd & Vetted by NIT Delhi.</td></tr>
</table>

Period	October' 2024 to December 2024	Addition study (if any)
	maintenance of water treatment and cooling infrastructure before use, ensuring operational efficiency of the plant.	
Impact study on biodiversity and aquatic ecology	Recommendations of study report: • **Afforestation**: Plant native species like Sal, Neem, Amla, and Tamarind • **Wildlife Infrastructure**: Build watch towers, waterholes, salt licks, and underpasses to support fauna movement and reduce conflict. • **Fire & Poaching Control**: Deploy fire watchers and anti-poaching squads during critical seasons. • **Community Engagement**: Form eco-clubs, run awareness campaigns, and promote sustainable livelihoods (e.g. poultry, agroforestry). • **Species Protection**: Implement conservation plans for Schedule-I species like Jungle Cat, Indian Fox, Sambar Deer, Sloth Bear, and Indian Leopard. • **Monitoring**: Use trap cameras and field kits to track wildlife and habitat changes. • **Budget**: Allocated ₹133 Lakhs for 5 years for implementation in phased manner.	Indian Institute of Social Welfare and Business Management, University of Calcutta in 2025**.**
Risk Assessment Study	Project specific risk assessment with respect to storage of LDO & Coal storage and other hazardous chemicals is included in Final EIA-EMP Report. The appropriate preventive measures and necessary safeguards such as toxic and flammable gas detectors, alarm / interlock systems, breathing apparatus for working personnel, fire protection systems such as fire extinguishers, water curtain, fire water hydrants in place, the untoward consequences and the major risk due to the same could be eradicated	Gaurang Environmental Solutions Pvt. Ltd.
Marine Impact Assessment Study	Not Applicable	--

28.8.12: The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal	Remarks
1	Municipal Solid Waste	Plant Canteen	90	Collected;segregated using color coded waste bin, Organic waste converters (OWC)	Inorganic will be disposed via local municipal authorized vendor &	-

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal	Remarks
					Organic/ Biodegradable waste by OWC.	
2	E-waste	IT & Telecom Equipment	3.5 TPA	Collected; segregated	Registered Recycler vendor	
3	Battery waste from UPS	Automotive & Industrial	7 TPA	Collected; segregated	Authorized Vendor	
4	Bio medical waste	First aid center	0.12 TPA	Collected; segregated	Authorized vendor	
5	Hazardous Waste	Plant Operation	Used/ Spent Oil – 100 TPA, Waste or residues Empty Barrels/ Containers/ Contaminated Liners – 15 TPA contaminated cotton – 5.0 TPA	-	Registered Recyclers/Pre-processors with SPCB & Authorized Recyclers	

28.8.13: Public Consultation:

The public hearing was conducted on 15.05.2025 at Project Site - Anuppur Thermal Energy (MP) Pvt. Ltd. (Project Site), Village Majhauli, Chhatai Road, Post-Kothi, Tehsil Kotma, District-Anuppur (MP)

Details of advertisement given	Raj Express**,** Jabalpur **(Hindi) - 10.04.2025,** Dainik Bhaskar, Jabalpur (Hindi)- 11.04.2025, Patrika, Jabalpur (Hindi)- 15.04.2025, **& Times of India, Bhopal (English) -10.04.2025**
Date of public consultation	**15.05.2025 at 12:00 P.M. to 2:00 P.M**
Venue	**Anuppur Thermal Energy (MP) Pvt. Ltd. (Project Site), Village Majhauli, Chhatai Road, Post-Kothi, Tehsil Kotma, District-Anuppur (MP)**
Presiding Officer	Additional Collector and Additional District Magistrate, Anuppur
Major issues raised	**Employment Opportunity & Local Development**
No. of people attended	• About 500 People were present • 26 No. Verbal representation • 82 No. Written Representation/ Responses received from local people/villagers

As per the Public hearing minutes, about 500 nos. of people attended the public hearing and 292 people signed the attendance register.

Summary of Public Needs highlighted during the public consultation:

Category	Key Concerns Raised	Responses Provided

Category	Key Concerns Raised	Responses Provided
Local Development	During the public hearing, the public was in full support for the proposed Project	The Project Proponent has assured the public that 'development will be done in the project area on priority basis through CER/CSR activities
Community Health & Education	Improvement of Community Health & Education	The Company will focus on improvement in Education, Community Health under the Socio-EMP (CER) Progrom
Employment	Employment Opportunities	The company is committed to providing preference to locals based on their educational qualification and experience
Community Infrastructure Development & Women Empowerment	Development of Community Rural infrastructure & women ampeworment	The company proposes to focus on developrnent of the project area in the following creas under the Socio-EMP (CER) initiative: Education, Health, Sustainable Livelihood Development, Community Infrastructure Development, compony will support women through Sustanctile Livelihood Development initiative

Action plan as per MoEF&CC O.M. dated 30/09/2020 to address the concerns of public consultation:

Sr. No	Physical Activity/Target and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
		25-26	26-27	27-28	28-29	29-30	
A	**Educational Initiatives**						
	Modernization, Repair & construction/maintenance of identified Primary / Higher Secondary School of nearby villages of the project site in consultation with Local Government/School Authorities in villages Chhatai & Majhtoliya.	1.0	1.5	1.5	1.5	1.5	7.0
	Distribution of drinking water filters/Drinking water coolers in schools in Umarda and others nearby villages.	0.7	0.7	0.7	0.7	0.7	3.5
	Basic teaching and learning infrastructure support to Govt. Schools, Supporting in creation of assembly halls, prayer halls, classrooms and smart class, computer room, space for mid-day meals, playground, school boundary walls etc. for government schools in villages Umarda Chhatai, Kothi, Tarsili.	1.0	1.5	1.5	1.5	1.5	7.0
	Online courses for students in emerging technologies such as Artificial Intelligence, Electric Vehicles, Renewable Energy etc. to equip students with job-ready skills through Adani Skill Development Centre (ASDC).	1.2	1.2	1.2	1.2	1.2	6.0
	Sub Total	**3.9**	**4.9**	**4.9**	**4.9**	**4.9**	**23.5**
B	**Community Health Initiatives**						

Sr. No	Physical Activity/Target and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
	Development of hospitals, strengthening of PHC's & CHC's, and improvement of health facilities in Tarsili & other nearby villages.	1.0	1.5	1.9	2.0	2.0	8.4
	Rural Medical Camps through Medical Team of Primary Health Centre @ 5 Nos. of camps per month (@ 75 patients per camp), Safe Menstrual Hygiene Management Awareness, Mega Health Camp, Cataract Screening & Operation in Kothi, Tarsili, Umarda & other nearby villages. Sanitary napkin vending & disposal machine, provision of Girls' Toilets with regular water supply facilities.	0.8	1.6	1.6	2	2	8
	Promotion of awareness of malnutrition and anemia.	0.24	0.24	0.24	0.24	0.24	1.2
	Promotion of Poshan Vatika at backyard of villagers & Project Suposhan.	0.68	0.68	0.68	0.68	0.68	3.4
	Sub Total	**2.72**	**4.02**	**4.42**	**4.92**	**4.92**	**21**
C	**Sustainable Livelihood and Women Empowerment**						
	Adani Skill Development Centre (ASDC/SDC) to train the youth under different trades viz. Welding, Fitting, Masonry & Bar-bending, Electrical, industrial machine operating & digital literacy/smart classes.	0.8	1.6	1.6	1.8	1.8	7.6
	Development & Support for Drip irrigation, assistance for mushroom, vegetable cultivation and livestock management in core zone villages.	0.74	0.74	0.74	0.74	0.74	3.7
	Sub Total	**1.54**	**2.34**	**2.34**	**2.54**	**2.54**	**11.3**
D	**Community Infrastructure Development**						
	Repairing, strengthening & Maintenance of Existing Roads in consultation with Gram Panchayats/Local Administration	1.0	3.0	3.0	3.5	1.0	11.5
	To provide facility for potable drinking water, and water supply system through overhead tanks	0.4	0.4	0.4	0.4	0.4	2.0
	Creation of clean and hygienic environment by proper drainage systems, community sanitation campaign, waste management awareness etc. implementation of Swachchh Bharat Initiative.	0.6	0.6	0.8	0.8	0.7	3.5
	Upgradation & Renovation of sanitation facilities such as toilets in schools with priority for girls.	1.4	1.4	1.4	1.4	1.4	7.0
	Provision of Solar Power and street lighting/panels in nearby schools, local health centers of nearby villages, green nurturing programs, plantation drives etc.	1.02	1.02	1.02	1.02	1.02	5.1
	Sub Total	**4.42**	**6.42**	**6.62**	**7.12**	**4.52**	**29.1**
E	**Sports & Culture Development**						

Sr. No	Physical Activity/Target and action Plan	Year of implementation (Rs. In Crores)					Budget (in Crores)
	Promotion of sports for youths and women	0.46	0.46	0.46	0.46	0.46	2.3
	Cultural activities for villagers	0.16	0.16	0.16	0.16	0.16	0.80
	Sub Total	**0.62**	**0.62**	**0.62**	**0.62**	**0.62**	**3.10**
F	Tree plantation in Govt. School and Community Health Centre in Villages Umarda, Chhatai & Tarsili	**0.7**	**0.7**	**0.7**	**0.7**	**0.7**	**3.50**
Total Budget		**13.9**	**19**	**19.6**	**20.8**	**18.2**	**91.5**

28.8.14: The capital budget of the proposed project is Rs. 36,600 Crores and the capital cost for environmental protection measures is proposed as Rs. 5,994 Crores (Excluding cost towards addressal of Public Consultation issues). The annual recurring cost towards the environmental protection measures is proposed as Rs. 61.25 Crores (Excluding cost towards addressal of Public Consultation issues). The employment generation from the proposed project (Construction Phase) is 350 (Permanent) and 8,000 (Contractual) and during Operation phase; (550 – Permanent & 2000 Contractual). The details of cost for environmental protection measures are as follows:

S. No.	Item Description	Cost (Rs. in Crores)	Recurring Cost (Rs. in Crores)
1	Air Pollution Control	4869	50.0
2	Noise Control	6.5	0.50
3	Water Pollution Control (Including RWH +Solar)	507	5.0
4	Ash Management	504.5	5.5
5	Environmental Monitoring & Management	21.75	0.25
6	Green Belt Development	24 (Capital & Recurring 5 years plan)	
	Total	**5994 Crores (5 Years)**	
7	Addressal of Public Consultation issues	91.5 (CER budget for 5 years)	

28.8.15: The proposed greenbelt will be developed in 123 Ha which is about 33.15% of the total proposed project area of 371 Ha with a total sapling of 3,17,500 nos. A 10m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 3,17,500 saplings will be planted and nurtured in 123 hectares in 5 years.
Budget of 24.0 Crores is earmarked for Greenbelt development including recurring budget is 6.04 Crores for Maintenance/Casualty replacement.

Phase Wise Plan (5years) for Green Belt Development:

Year	Plantation on safety zone & Un-worked Area		Cost of sapling along with maintenance	
	Area (Ha.)	No. of Trees (estimated)	Capital cost	Recuring cost/Annum
2025-26	30.9	77,250	for Plantation/ Greenbelt development	Maintenance/ Casualty replacement- 6.04 Crore
2026-27	32.2	80,500		
2027-28	12.58	31,450		
2028-29	27.45	68,625		

2029-30	6.95	17,375		
Remaining Area gap filling	12.92	42,300		
Total	**123**	**3,17,500**	**18 Crores**	**6.04 Crores**
			Total 24 Crores	

28.8.16: Ash management

A. Ash management (Only for green field cases) –

Details	**Annual generation (MTPA)**	**Utilization (MTPA)**	**% of utilization**	**Balance quantity (MTPA)**	**No. of storage silos with capacity**
Ash (Fly & Bottom)	**5.32**	**5.32**	**100**	**0**	**5 x 2500 MT**

B. Ash Pond details: -

S.No.	**Details of Ash Pond**	**Ash pond**
1.	Area (Ha)	47
2.	Dyke height (m)	15
3.	Volume (m^3)	70.5 Lac m^3
4.	Quantity of ash to be disposed (Metric Tons)	84.6 Lac MT
5.	Expected life of ash pond (number of years and months)	Life of ash dyke is calculated as 20 years
6.	Type lining carried in ash pond: HDPE lining of LDPE lining or clay lining or No lining	HDPE
7.	Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD)	HCSD/MCSD
8.	Ratio of ash: water in slurry mix (1:_____):	65:35
9.	Ash water recycling system (AWRS): Yes or No	Yes
10.	Quantity of wastewater from ash pond to be discharged into land or water body (m^3)	0
11.	Details regarding dyke stability study and name of the organization who conducted the study:	N.A

TPP has proposed 100% Ash Utilization. However, approx. 5% may be diverted to the ash dyke in emergencies (such as during rains or low demand), Life of ash dyke is calculated 20 Years**.**

C. Ash utilization plan:

S.No.	**Activity (as applicable)**	**Quantity**	**Percentage**
1.	Fly ash based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	0.106 MTPA	2%
2.	Cement manufacturing	4.256 MTPA	80%
3.	Construction of roads, road and fly over embankment	0.958 MTPA	18%
	Total	**5.32 MTPA**	**100%**

28.8.17: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration is furnished as below:

A. **Summary of court cases :** There are seven (07) court cases related to Land and other arbitrations.

However, there are no court cases pertaining to the Environment & Forest.

B. Summary of Show Cause Notices – Nil

S. No	Issuing authority	Date	Reasons for the issuance of SCN	Status of reply submission	Present status
1	Not Applicable.				

C. Summary of violation

Any violation case pertaining to the project on following: iv. The Environment Protection Act, 1986 v. Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980. vi. The Wildlife (Protection) Act, 1972	**No.**

28.8.18: Compliance to the observations of sub-committee visit report: The EAC sub-committee had visited the site on 3rd July'2025. Point wise action plan for compliance of sub-committee recommendations are as below:

Sl. No.	Observations by EAC Sub-Committee	Compliance Status
1	As river Kewai is flowing close to the plant boundary, minimum 500 meters distance should be maintained between the Kewai river and ash pond. The river side shall be strengthened with earthen structure and proper construction of bund to avoid erosion and leakage. Further, three tier plantations should be carried out all along the plant boundary falling close to river.	500m distance shall be maintained between the Kewai River and the ash pond. To further mitigate risks of erosion and leakage; silt curtains/sedimentation ponds, and a rainwater harvesting pond with reinforced bunds have been proposed. The plant will operate on a Zero Liquid Discharge (ZLD) principle. Additionally, a three-tier plantation scheme using native species will be implemented to enhance ecological resilience.
2	PP should prepare a phase wise plan for the green belt development along the boundary of project area, internal roads, residential colony and other gap area with suitable plant species in consultation with the Agriculture / Horticulture /Forest Department. The greenbelt development along the plant boundary should be initiated right from the beginning of the project	Noted and agreed. A green belt covering 123 hectares will be developed along the plant boundary, internal roads, and other designated areas of the proposed Thermal Power Plant (TPP). Native species have been selected for the plantation, and this selection has been authenticated by the Divisional Forest Officer (DFO), Anuppur, vide letter no. Kramak/Ma.Chi/2025/3245

Sl. No.	Observations by EAC Sub-Committee	Compliance Status
		Dated:22.05.2025. The green belt development will commence from the inception of the project. Phase wise action plant (05 years) has been prepared and presented below.
3	Adequate environmental safety measures must be planned for the health and safety of the school children and villagers located close to the plant site	To ensure the health and safety of school children and villagers residing near the plant site, the following environmental safety measures have been proposed: 1. Installation of Highly efficient pollution control equipment's such as Electro-Static Precipitator (ESP),Dust Extraction and Suppression systems, STP, ETP etc. 2. Extensive plantation activities are proposed within and outside the study area, with a special focus on government schools and community health centres. 3. A budget of ₹5.1 crore under Socio EMP/CER has been allocated for solar street lighting and plantation drives. These initiatives are aimed at improving environmental conditions and safety in surrounding villages and school zones

28.8.19: Name of the EIA consultant: M/s Gaurang Environmental Solutions Pvt. Ltd. Certificate No. NABET/EIA/2326/RA 0338 Valid up to: 07.12.2026].

28.8.20: Written submissions

The written submission made by the proponent during the meeting is furnished as below:

S.No.	Additional Information Sought	Point-wise Reply/Clarification
1.	PP shall re-visit and submit revised Traffic impact assessment for the project.	Revised Traffic Assessment considering strengthening & widening of village road from State Highway to Project Site has been submitted.
2.	PP shall submit revised Brief Information/summary Format w.r.t recommendations of Sub-Committee of EAC & action plan to comply with same & details of court cases.	Revised Brief information/summary has been submitted.
3.	PP shall submit measures adopted for water optimization for proposed TPP.	Water requirement has been optimized to <2.5 m^3/MWh which is well within the 3.0 m^3/MWh stipulated by MoEFCC prescribed standard. Details water optimization measures for proposed TPP has been submitted.

In addition to above, we hereby Undertake and Confirm that:

1) Solar PV of 5 MW will be installed in the project site / available land in Anuppur district through Socio-EMP.
2) Plantation around the plant boundary will be initiated in the first year of project commencement.
3) Transportation of 70-80% of Fly ash will be done by rail.

Observations and deliberation of the EAC

28.8.21: The Committee observed and noted the following:

i. Instant proposal is for seeking Environmental Clearance for setting up of 4x800 MW Coal Based Ultra Super Critical Thermal Power Plant (USCTPP) by M/s Anuppur Thermal Energy (MP) Private Limited located at Villages Chhatai, Majhtoliya & Umarda, Tehsil Kotma, District Anuppur, Madhya Pradesh.

ii. The Project Site for instant proposal was earlier accorded Environmental Clearance (EC) was granted by the MoEF&CC, New Delhi vide File no. J 13012/144/2010-IA. II (T) dated 27.11.2012 to M/s Welspun Energy Anuppur Pvt. Ltd. for 1320 (2x660) MW Thermal Power Plant. Subsequently, M/s Welspun Energy Anuppur Pvt. Ltd. had obtained Consent to Establish (CTE) from Madhya Pradesh Pollution Control Board (MPPCB) vide letter dated 18.07.2013. Further, the MoEF&CC issued Transfer of Environmental Clearance to Anuppur Thermal Energy (MP) Private Ltd (ATEMPPL) & validity extension up to 26.11.2022, New Delhi vide letter No. F. No: J-13012/144/2010-IA. II(T) dated 07.01.2020. There is no activity undertaken at the site except the boundary wall construction. The validity of the EC lapsed on 26/11/2023. Now the configuration has changed from 2x660 MW to 4x800 MW in an area of 371 and de-novo EC process has been initiated.

iii. The EAC also took into consideration the drone survey of the project site and KML file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH portal.

iv. There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site as ascertained from DSS.

v. The project site is not located within the Critically Polluted Area (CPA) / Severally Polluted Area (SPA) as per CEPI assessment 2018 of CPCB.

vi. As per the categorization of CPCB, the proposed project do not fall within any CPA nor in any non-attainment cities as per MoEF &CC notification G.S.R. 465(E) dated 11/07/2025. Hence, it is classified as Category 'C' project with respect to FGD installation as per the records made available by the project proponent.

vii. ToR was granted vide letter dated 28.10.2024.

viii. Total land of 371 ha is required for the project. The land is already under the possession of project proponent. No forest land is involved.

ix. Kewai River flows at a distance of approximately 70 meters west (as per DSS) of the proposed Anuppur Thermal Power Project site. As required by MoEF&CC O.M. dated 14.02.2022, the HFL certificate from WRD, Anuppur received. HFL of Kewai River is 538.5m (MSL) whereas proposed project Site elevation is 562m (MSL) which is substantially higher elevation. In compliance with the siting criteria and to ensure the ecological integrity of the river, the project layout has been designed outside the HFL influence zone and includes a greenbelt buffer along the riverbank. A detailed river conservation action plan will be adopted, which includes:

- Maintaining a safe setback distance from the river edge.

- Plantation of native species to stabilize the riverbank.
- Avoiding any discharge or obstruction in the natural flow of the river.
- Regular monitoring of surface water quality.

In this regard, proponent committed that 500m distance shall be maintained between the Kewai River and the ash pond. To further mitigate risks of erosion and leakage; silt curtains/sedimentation ponds, and a rainwater harvesting pond with reinforced bunds have been proposed.

x. Total 16 Schedule I Species found in the buffer zone during field survey and secondary sources. Wildlife and conservation plan for schedule I species prepared and submitted for approval.

xi. Total fresh water requirement is 153425 KLD. Approval for drawing 153425 KLD of water for all 4 units from River Sone has been obtained from WRD, Madhya Pradesh vide letter dated 21/01/2025. The water will be transported to the plant site through pipeline.

xii. The power requirement for the proposed project is estimated as 7.5 MW during Construction Phase and will be obtained from nearby UP Electricity Board Sub-station

xiii. Two numbers 275 meters high Chimney (Twin flue) is proposed and proponent will abide by and adhere to all the Notifications/ Directives issued by the MoEFCC from time to time regarding the TPP.

xiv. Zero Liquid Discharge system will be adopted.

xv. Transportation of coal will be done 100% by rail. No road transportation is involved.

xvi. The proposed greenbelt will be developed in 123 Ha which is about 33.15% of the total proposed project area of 371 Ha with a total sapling of 3,17,500 nos. A 10m wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 3,17,500 saplings will be planted and nurtured in 123 hectares in 5 years.

xvii. Ash pond is proposed in an area of 47 Ha for ash disposal.

xviii. Public hearing for the project was held on 15/05/2025. The Committee looked in to the videography of the public hearing proceedings, deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues raised during the public hearing and found it satisfactory. The committee advised the PP to implement the PH action plan in a time bound manner. An amount of Rs. 91.25 crores has been earmarked to address the issues raised during public hearing.

xix. The capital budget of the proposed project is Rs. 36,600 Crores and the capital cost for environmental protection measures is proposed as Rs. 5,994 Crores (Excluding cost towards addressal of Public Consultation issues). The annual recurring cost towards the environmental protection measures is proposed as Rs. 61.25 Crores (Excluding cost towards addressal of Public Consultation issues).

xx. The Committee deliberated on the baseline data and incremental GLC due to the proposed project. The committee noted that the proponent is providing Electrostatic Precipitator (ESP), Low Nox Burner, SOFA technology and Dust Extraction & Suppression System to control the emission of Particulate matter and NOx and also stacks with a height of 275 m will be provided to control & regulate the air emission from the proposed project.

xxi. Committee deliberated on the action plan of Hydrogeology study; Bio-diversity/aquatic ecology study and Risk assessment study and found it satisfactory.

xxii. The committee noted that with respect to water pollution control, domestic wastewater will be treated in Sewage treatment plant and treated sewage water shall be reused. Effluent will be

treated in ETP. There will be no effluent discharge from the premises, hence the ZLD will be maintained. A state-of-the-art roof top rain water harvesting system will be provided to collect the run -off for ground water recharging.

xxiii. The Committee noted that the EIA reports are in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components.

xxiv. There are seven court cases pending and no case is related to the environment related matters.

xxv. The EAC also deliberated on the written submission of the project proponent and found it satisfactory.

xxvi. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

Recommendations of the Committee:

28.8.22: In view of the foregoing and after detailed deliberations, the committee ***recommended*** the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 **subject to uploading of written submission on PARIVESH Portal** and stipulation of the following specific conditions and general conditions based on project specific requirements:

A. Specific conditions

[A] Environmental Management

1) Project proponent shall ensure that 100% utilization of ash generated from the project in accordance with the ash utilization notification dated 31/12/2021 and its subsequent amendment. Area for the proposed ash dyke shall not exceed 47 ha as committed.
2) Project layout shall be kept outside the HFL influence zone of Kewai river and greenbelt buffer shall be developed all along the periphery of the riverbank as committed. A detailed river conservation action plan shall be adopted inter-alia the following:
   - Maintaining a safe setback distance from the river edge.
   - Plantation of native species to stabilize the riverbank.
   - Avoiding any discharge or obstruction in the natural flow of the river.
   - Regular monitoring of surface water quality.
   - 500m distance shall be maintained between the Kewai River and the ash pond.
   - Silt curtains/sedimentation ponds, and a rainwater harvesting pond with reinforced bunds shall be established.
3) Project proponent shall establish 5 Continuous Ambient Air Quality Monitoring Stations (CAAQMS) at suitable locations in and around project site in consultation with MPPCB within one year from the date of grant of EC.
4) Project proponent shall comply with the recommendations made in the biodiversity assessment report and Hydrogeology report in a time bound manner. Compliance status in this regard shall be submitted to the Regional Office of MoEF&CC along with the six monthly compliance report.
5) The water requirement for project is estimated as 153425 KLD and the same shall be met from Sone River. The specific water consumption for all the units shall be less than 3.0 m3/MWhr.
6) The entire coal requirement for 4 units of TPP (4x800 MW) shall be transported by rail network only and no road transportation is permitted.

7) Project proponent shall store harvested rainwater in the project boundary and utilize the same for plantation, recharging water in the pond and domestic utilization in colonies. A record shall be maintained of water collected through rainwater and its supply system. PP shall get the water audit done every year to optimize the water requirement.
8) Project proponent shall implement the protective measure proposed in EMP in a time-bound manner. The budget earmarked for the same is Rs. 5994 crores and should be kept in separate accounts and audited annually. The implementation status along with the amount spent with documentary proof shall be submitted to the concerned Regional Office for the activities carried out during the previous year.
9) Project proponent shall assess the carbon footprint of the project and develop carbon sink/carbon sequestration resources using modern technologies. The implementation report shall be submitted to the concerned Regional Office of the MoEF&CC.
10) Project proponent shall ensure that diesel operated vehicles will be switched over to E-Vehicles/CNG vehicles in a time bound manner, replace the passenger vehicles to E-vehicle in phased manner. Further, for local movement of officials, Contract of Vehicles deployment shall be awarded to Project affected people and all efforts for adopting heavy E-vehicles/CNG vehicles like Bulkers for ash transportation for short distance subject to availability of such E-vehicle and adequate charging infrastructure in the surrounding area shall be provided. PP shall submit the action taken report to concerned RO with amount spent, photographs (before & after), number of such non diesel vehicles deployed etc. in six monthly compliance report.
11) The Project Proponent shall provide two stacks of each 275 meters height and shall abide by the provisions of the notification number G.S.R 465 (E) dated 11/07/2025 related to FGD.
12) Project proponent shall ensure that pipelines carrying the fly ash and effluent shall be inspected regularly for any leakages.
13) Effluent of 2125 KLD will be treated through Effluent Treatment Plant. As committed by the Project proponent, Zero liquid discharge shall be adopted for the existing and the proposed plant. No wastewater will be discharged outside the project site.
14) PP shall implement the concurrent plantation plan in a time bound manner. Total of 123 ha area (33% of total area of 371 ha) will be developed as greenbelt. A 5 m - 50 m wide (min 25 m) greenbelt, consisting of at least 3 tiers around plant boundary & kewai river will be developed as greenbelt and green cover as per CPCB guidelines within 3 years. PP shall also adopt Miyawaki plantation technique and plantation with minimum 2 meter height of the saplings. PP should annually submit the audited statement of expenditure along with proof of activities viz. photographs (before & after with geolocation date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC and on PARIVESH Portal as the case may be for the activities carried out during previous year.
15) Project proponent shall carry out community plantation with incentive scheme by distributing 50,000 saplings per year for a period of five years. Further, PP shall provide basic facilities to the nearby schools such as drinking water, sanitation facilities (sanitary napkin vending machines) and shall also develop green belt around the nearby schools. Further, PP shall organize quarterly awareness programs for school students to educate them on the significance and preservation of trees.
16) Wildlife conservation plan as approved by the competent authority shall be implemented. Additional, budget shall be added in the plan, in case additional measures suggested by state wildlife department. The final Wildlife conservation plan duly approved by the CWLW shall be submitted to RO, MoEF&CC within a time frame of three months from the date of grant of EC and the budget approved by the concerned authority shall be deposited in a government account.
17) Project proponent shall install LED display of air quality (Continuous AAQ monitoring) and stack emission (Continuous emission monitoring) at prominent locations preferably outside the plant's main entrance for public viewing and in administrative complex and maintenance of devices shall be done regularly.

18) Project proponent shall carry out Water Sprinkling on roads inside the plant area/ administrative/ residential areas and outside the plant area at least for 2 KM on a regular basis to control the air pollution. A logbook shall be maintained for the activity and be in six-monthly compliance report.
19) PP shall deploy vacuum based vehicle for everyday cleaning of the road in and around plant site at least for 5 KM.
20) Environment Audit of plant shall be done annually and report shall be submitted to Regional office of the Ministry.
21) A detailed action plan regarding leachate handling shall be prepared and implemented in consultation with SPCB and the same shall be submitted to the Regional Office of the Ministry. Leachate shall be treated and reused. No treated leachate shall be discharged in any circumstances. Characteristics of Leachate and the treated leachate shall be monitored once in quarter and records shall be maintained.
22) Oil and grease recovered from the treatment plant should be disposed only through authorized recyclers.
23) Monitoring of surface water quality and Ground Water quality shall also be regularly conducted in and around the project site and records to be maintained. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall also be undertaken and results/findings submitted along with half yearly monitoring report. The monitored data shall be submitted regularly on PARIVESH portal as part of Half Yearly compliance report
24) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
25) PP shall install a solar panel capacity of 5 MW or more as per the availability of the area .
26) PP shall ensure that all types of plastic waste generated from the plant shall be stored separately in isolated area and disposed of strictly adhering to the Plastic Waste Management Rules 2016 (as amended). In pursuant to the Ministry's OM dated 18/07/2022. PP shall also create awareness among the people working in the project area as well as in its surrounding area on the ban on Single Use Plastic (SUP) in order to ensure compliance of Ministry's Notification published by the Ministry on 12/08/2021. A report along with photograph on the measures taken shall also be included in the six monthly compliance report submitted by PP.
27) PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than Green belt development. The action in this regard shall be submitted concerned RO in six monthly report.

[B] Socio-economic

1. A vision document comprising prospective plan for implementation of various CER activities, plantation programme outside the project cover area, rejuvenation and conservation of water bodies within 5 km radius of the project cover area shall be prepared and submitted to the Regional Office of the Ministry within 6 months. Implementation status of the same shall be reported to the Regional office in 6 monthly compliance report.
2. Epidemiological Study among population within 5 km radius of project cover area shall be carried out on regular interval (Once in two year) through independent agency. Necessary measures shall be taken as per findings of study in consultation with district administration. Action taken report shall be submitted to the Regional Office of the Ministry.
3. The budget proposed for PH is Rs. 91.25 Crores. The budget proposed shall be kept in a separate account and audited annually. Project proponent shall implement the action plan to address the issues raised during public hearing within a time frame of 5 years from the date of grant of EC. In addition to this, PP shall strengthen the existing Primary Health Center (PHC)

& Community Health Center (CHC) in the study area for better public health as committed. Compliance status in this regard shall be submitted along with the six monthly compliance to the concerned Regional Office of MoEF&CC.

4. The establishment of a robust public grievance redressal mechanism to address concerns and complaints from local communities regarding the power plant's operations, environmental impacts, or social issues shall be developed. A Senior Officer shall review the functioning of the mechanism twice in a month.

[C] Miscellaneous

1. An Environmental Cell headed by the Environment Manager with postgraduate qualification in environmental science/environmental engineering, shall be created. It shall be ensured that the Head of the Cell shall directly report to the Head of the Plant who would be accountable for implementation of environmental regulations and social impact improvement/mitigation measures.
2. Consent for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
3. All necessary clearance from the concerned Authority, as may be applicable should be obtained prior to commencement of project or activity.

B. General conditions

A. Statutory compliance:

1. Emission Standards for Thermal Power Plants as per Ministry's Notification S.O. 3305 (E) dated 7.12.2015, G.S.R.593 (E) dated 28.6.2018 and as amended from time to time shall be complied.
2. Part C of Schedule II of Municipal Solid Wastes Rules, 2016 dated 08.04.2016 as amended from time to time shall be complied for power plants based on Municipal Solid Waste.
3. MoEF&CC Notifications on Water Consumption vide Notification No. S.O. 3305 (E) dated 07.12.2015 read with G.S.R 593 (E) dated 28.6.2018 as amended from time to time shall be complied.
4. The recommendation from Standing Committee of NBWL under the Wildlife (Protection) Act, 1972 should be obtained, if applicable.
5. No Objection Certificate from Ministry of Civil Aviation be obtained for installation of requisite chimney height and its siting criteria for height clearance.

B. Ash content/ mode of transportation of coal:

1. MoEF&CC Notification issued vide S.O. 1561 (E) dated 21.05.2020 and as amended from time to time shall be complied which inter-alia include use of coal by Thermal Power Plants, without stipulations as regards ash content or distance, shall be permitted subject to compliance of conditions prescribed under (1) Setting Up Technology Solution for emission norms, (2) Management of Ash Ponds and (3) Transportation.

C. Air quality monitoring and Management:

1. Project proponent shall abide by the provisions of the notification number G.S.R 465(E) dated 11/07/2025 related to FGD.
2. Low NO_X Burners with Over Fire Air (OFA) system shall be installed to achieve NO_X emission standard of 100 mg/Nm^3.

3. High efficiency Electrostatic Precipitators (ESPs) shall be installed in each unit to ensure that particulate matter (PM) emission to meet the stipulated standards of 30 mg/Nm^3.
4. Stack with a height of 275 meters shall be provided with continuous online monitoring instruments for SO_2, Nox and Particulate Matter as per extant rules.
5. Exit velocity of flue gases shall not be less than 20-25 m/s. Mercury emissions from stack shall also be monitored periodically.
6. Continuous Ambient Air Quality monitoring system shall be set up to monitor common/criteria pollutants from the flue gases such as PM_{10}, $PM_{2.5}$, SO_2, NO_X within the plant area at five locations. The monitoring of other locations (at least three locations outside the plant area covering upwind and downwind directions at an angle of 120° each) shall be carried out manually.
7. Adequate dust extraction/suppression system shall be installed in coal handling, ash handling areas and material transfer points to control fugitive emissions.
8. Appropriate Air Pollution Control measures (Des/DSs) be provided at all the dust generating sources including sufficient water sprinkling arrangements at various locations viz., roads, excavation sites, crusher plants, transfer points, loading and unloading areas, etc.

D. Noise pollution and its control measures:

1. The Ambient Noise levels shall meet the standards prescribed as per the Noise Pollution (Regulation and Control) Rules, 2000.
2. Persons exposed to high noise generating equipment shall use Personal Protective Equipment (PPE) like earplugs/ear muffs, etc.
3. Periodical medical examination on hearing loss shall be carried out for all the workers and maintain audiometric record and for treatment of any hearing loss including rotating to non-noisy/less noisy areas.

E. Human Health Environment:

1. Bi-annual Health check-up of all the workers is to be conducted. The Occupational health study shall take into account of chronic exposure to noise which may lead to adverse effects like increase in heart rate and blood pressure, hypertension and peripheral vasoconstriction and thus increased peripheral vascular resistance. Similarly, the study shall also assess the health impacts due to air polluting agents.
2. Impact of operation of power plant on agricultural crops, large water bodies (as applicable) once in two years by engaging an institute of repute. The study shall also include impact due to heavy metals associated with emission from power plant.

F. Water quality monitoring and Management:

1. Induced/Natural draft closed cycle wet cooling system including cooling towers shall be set up with minimum Cycles of Concentration (COC) of 5.0 or above for power plants using fresh water to achieve specific water consumption of 3.0 m^3/MWhr.
2. In case of the water withdrawal from river, a minimum flow 15% of the average flow of 120 consecutive leanest days should be maintained for environmental flow whichever is higher, to be released during the lean season after water withdrawal for proposed power plant.
3. Records pertaining to measurements of daily water withdrawal and river flows (obtained from Irrigation Department/Water Resources Department) immediately upstream and downstream of withdrawal site shall be maintained.
4. Regular (at least once in six months) monitoring of groundwater quality in and around the ash pond area including presence of heavy metals (Hg, Cr, As, Pb, etc.) shall be carried out as per CPCB guidelines. Surface water quality monitoring shall be undertaken for major surface water bodies as per the EMP. The data so obtained should be compared with the baseline data

so as to ensure that the groundwater and surface water quality is not adversely impacted due to the project & its activities.

5. The treated effluents emanating from the different processes such as DM plant, boiler blow down, ash pond/dyke, sewage, etc. conforming to the prescribed standards shall be re-circulated and reused. Sludge/ rejects will be disposed in accordance with the Hazardous Waste Management Rules.
6. Hot water dispensed from the condenser should be adequately cooled to ensure the temperature of the released surface water is not more than 5 degrees Celsius above the temperature of the intake water.
7. Wastewater generation of 2125 KLD from various sources (viz. cooling tower blowdown, boiler blow down, wastewater from ash handling, etc) shall be treated to meet the standards of pH: 6.5-8.5; Total Suspended Solids: 100 mg/l; Oil & Grease: 20 mg/l; Copper: 1 mg/l; Iron:1 mg/l; Free Chlorine: 0.5; Zinc: 1.0 mg/l; Total Chromium: 0.2 mg/l; Phosphate: 5.0 mg/l.
8. Sewage generation of 22 KLD will be treated by setting up Sewage Treatment plant to maintain the treated sewage characteristics of pH: 6.5-9.0; Bio-Chemical Oxygen Demand (BOD): 30 mg/l; Total Suspended Solids: 100 mg/l; Fecal Coliforms (Most Probable Number).
9. Action plan by the TPPs located within 50 km of a municipality or any Urban Local Body (ULB) to use the treated sewage water produced by the municipality/Urban Local Body(ULB) to reduce fresh water consumption

G. Risk Mitigation and Disaster Management:

1. Adequate safety measures and environmental safeguards shall be provided in the plant area to control spontaneous fires in coal yard, especially during dry and humid season.
2. Storage facilities for auxiliary liquid fuel such as LDO and HFO/LSHS shall be made as per the extant rules in the plant area in accordance with the directives of Petroleum & Explosives Safety Organisation (PESO). Sulphur Content in the liquid fuel should not exceed 0.5%.
3. Ergonomic working conditions with First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
4. Safety management plan based on Risk Assessment shall be prepared to limit the risk exposure to the workers within the plant boundary.
5. Regular mock drills for on-site emergency management plan and Integrated Emergency Response System shall be developed for all kind of possible disaster situations.

H. Green belt and Biodiversity conservation:

1. Green belt shall be developed in an area of 33% of the total plant area with indigenous native tree species in accordance with CPCB guidelines.
2. In-situ/ex-situ Conservation Plan for the conservation of flora and fauna should be prepared and implemented.

I. Waste management:

1. Solid waste management should be planned in accordance with extant Solid Waste Management Rules, 2016.
2. Toxicity Characteristic Leachate Procedure (TCLP) test shall be conducted for any substance, potential of leaching heavy metals into the surrounding areas as well as into the groundwater.
3. Ash pond shall be lined with impervious liner as per the soil conditions. Adequate dam/dyke safety measures shall also be implemented to protect the ash dyke from getting breached.
4. Fly ash shall be collected in dry form and ash generated shall be used in phased manner as per provisions of the Notification on Ash Utilization issued by the Ministry S.O. 5481 dated

31.12.2021, S.O.6169 (E) dated 30.12.2021, S.O.05 (E) dated 01.01.2024 and amendment thereto.

5. Unutilized ash if any shall be disposed off in the ash pond in the form of High Concentration Slurry method.

J. Monitoring of compliance:

1. Environmental Audit of the project be taken up by the third party for preparation of Environmental Statement as per Form-V & Conditions stipulated in the EC and report be submitted to the Ministry.
2. Resettlement & Rehabilitation Plan as per the extant rules of Govt. of India and respective State Govt. shall be followed, if applicable.
3. Energy Conservation Plan to be implemented as envisaged in the EIA / EMP report. Renewable Energy Purchase Obligation as set by MoP/State Government shall be met either by establishing renewable energy power plant (such as solar, wind, etc.) or by purchasing Renewable Energy Certificates.
4. Energy and Water Audit shall be conducted at least once in two years and recommendations arising out of the Report should be followed. A report in this regard shall be submitted to Ministry's Regional Office.
5. The project proponent shall (Post-EC Monitoring):
   a. Send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government;
   b. Upload the clearance letter on the web site of the company as a part of information to the general public.
   c. Inform the public through advertisement within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forest and Climate Change (MoEF&CC) at http://parviesh.nic.in.
   d. Upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same periodically;
   e. Monitor the criteria pollutants level namely; PM (PM10 & PM2.5 in case of ambient AAQ), SO2, Nox (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company;
   f. Submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB;
   g. Submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company;
   h. Inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project and the date of commencement of the land development work.

K. Corporate Environmental Responsibility (CER) activities:

1. CER activities will be carried out as per Ministry's OM F.No.22- 65/2017- IA.III dated 30th September, 2020 and 22-65/2017- IA.III dated 25.02.2021 or as proposed by the PP in reference to Public Hearing or as earmarked in the EIA/EMP report along with the detailed scheduled of implementation with appropriate budgeting.

Agenda No. 28.9

28.9. Expansion of 2x800 MW (Stage-I) Darlipali Supercritical Coal Based Thermal Power Plant by Addition of One Unit of 800 MW [1x800MW(Stage-II) Darlipali Super Thermal Power Project by **M/s. NTPC Limited** located at **Village Darlipali, Raidihi, in Lephripara Tehsil, Village Chuabahal, Kalamegha, Laikera, Bihajor, Kanaktura in Hemgir Tehsil of Sundergarh District and Village Tileimal, Chichinda, Kechobahal, in Jharsuguda Tehsil and Village Chhadarama in Lakhanpur Tehsil of Jharsuguda District in Odisha - Amendment in Term of Reference (ToR) – regarding.**

[Proposal No: IA/OR/THE/544298/2025; F.No. J-13012/65/2008-IA. II (T)]

28.9.1: M/s. NTPC Limited has made an online application vide proposal no. IA/OR/THE/544298/2025 dated 09.07.2025 along with Form-3 seeking amendment in Terms of Reference (TOR) granted vide Letter Dated 17.04.2023 under the provisions of the EIA notification,2006 for the project mentioned above. The proposed project activity is listed at item No. 1(d) – Thermal Power Plants under Category 'A' of the schedule of the EIA Notification, 2006 and appraised at the Central Level.

Name of the EIA consultant: M/s Mantec Consultants Pvt Ltd, Noida. [S. No. 136. List of ACOs with their Certificate No.: NABET/EIA/23-26/RA 0305_Rev.01 (Valid up to 20 April 2026].

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

28.9.2: Environmental Clearance for existing 2x800 MW (1600 MW) unit was accorded by the Ministry of Environment, Forest and Climate Change (MoEF&CC) vide letter No. J-13012/65/2008. IA. II (T), dated 17.02.2014 for setting up of Thermal Power Plant. Presently, the power plant is under operation and has a valid CTO upto 31.03.2026 accorded by Odisha State Pollution Control board on 28.03.2025 vide letter no. 6565.

28.9.3: Implementation status of the existing EC dated 17/02/2014

S. N.	Configuration	Capacity (MW)	As per EC dated 17.02.2014	Implementation Status as on 05.06.2025	Production as per CTO
1	(2x800 MW)	1600 MW	2x800 MW (Stage-I) Darlipali Supercritical Coal Based Thermal Power Plant at village Darlipali, in Lephripara Taluk, in Sundergarh Distt., in Orissa	Under Operation	1600 MW

28.9.4: Details of the Terms of Reference (TOR) for which amendment is sought: Terms of Reference (TOR) for expansion of M/s. Darlipali Super Thermal Power Plant by adding 1x800 MW unit to existing 2x800 MW (1600 MW) unit was accorded by MoEF&CC on 17.04.2023 for undertaking EIA/EMP study. Subsequently, the ToR was amended on

13/11/2023. The proposed expansion is from 1600MW (2x800 MW) to 2400 MW (with addition of a 1x800 MW unit).

S. No.	Details of Letter No.	Terms of Reference (TOR)	Capacity (MW)	Date of issuance
1	F.N.J-13012/65/2008-IA. I(T)	Expansion of Darlipali Super Coal Based Thermal Power Project by installing lx800 MW (Stage-II) project in existing project (2x800 MW) at village Darlipali, Taluk Lephripara, District Sundergarh (Orissa) by M/ s NTPC Limited	lx800 MW	17.04.2023

28.9.3 Implementation status of the ToR: Project site falls in two Districts namely Sundergarh and Jharsuguda of Odisha State. The Implementation status of the ToR dated 17.04.2023 is as follows:

S No	Details	Implementation status
01	Baseline	Baseline data was collected for the period April to June 2023.
02	Public Hearing	Public hearing was conducted at two Districts of Odisha: **Jharsudua District:** **Date and Time:** 22.10.2024 at 11:00 A.M. **Venue:** Mundadhipa Football Ground, Tileimal, District-Jharsuguda **Sundergarh District:** **Date and Time:** 04.11.2024 at 10:30 A.M **Venue:** Playground near Chandlipahad, GP: Raidihi, under Lephripara tehsil of Sundargarh district

28.9.5: Details of the condition for which amendment is sought: The details of the amendment sought by the proponent in the ToR dated 17/04/2023 are summarized as below:

Condition no.	Details of Conditions as per TOR	Amendment Sought	Justification
Subject	Expansion of Darlipali Super Coal Based Thermal Power Project by installing 1x800 MW (Stage-II) project in existing project (2x800 MW) at village Darlipali, Taluk Lephripara, District Sundergarh, Odisha by M/s NTPC Limited-Term of Reference (ToR)-reg.	Expansion of 2x800 MW (Stage-I) Darlipali Supercritical Coal Based Thermal Power Plant by Addition of One Unit of 800 MW [1x800MW(Stage-II) Darlipali Super Thermal Power Project] at Village Darlipali, Raidihi, in Lephripara Tehsil, Village Chuabahal, Kalamegha, Laikera, Bihajor, Kanaktura in Hemgir Tehsil of Sundergarh District and Village Tileimal, Chichinda, Kechobahal, in Jharsuguda Tehsil and Village Chhadarama in Lakhanpur Tehsil of Jharsuguda District in Odisha by M/s NTPC Limited -Term of Reference(ToR)-reg.	The Plant falling in two district, accordingly the village, Taluka and district included in subject matter.

<table>
<tr><th>Condition no.</th><th>Details of Conditions as per TOR</th><th>Amendment Sought</th><th>Justification</th></tr>
<tr><td>4 (ii)</td><td>Water Requirement:
Quantity of water Requirement: 2400 m^3/hr
Cooling System: Water Cooled condenser system</td><td>Water Requirement:
Quantity of water Requirement: 930 m^3/hr
Cooling System: Air Cooled condenser system</td><td>In view of anticipated scarcity of industrial water in future, NTPC pro-actively considered ACC in place of WCC to save water consumption for Darlipali Stage-II (1 x 800 MW) by 60% approximately.
(Reduced the water requirement from 2400 M^3/hr to 930 m^3/hr)
Reduction in water consumption will reduce water withdrawal and shall minimised the impact on local water resources and ecosystems.</td></tr>
<tr><td>4 (ii)</td><td>Land Area Breakup<table><tr><th>Description</th><th>Existing (Ha)</th><th>Proposed (Ha)</th><th>Total (Ha)</th></tr><tr><td>Main Plant</td><td>322.534</td><td>45.3248</td><td>367.8588</td></tr><tr><td>Township</td><td>62.3216</td><td>0</td><td>62.3216</td></tr><tr><td>Ash Pond</td><td>160</td><td>80</td><td>240</td></tr><tr><td>Railway siding, corridors etc.</td><td>54.035</td><td>0</td><td>54.035</td></tr><tr><td>Green Belt</td><td>76.89</td><td>34.587</td><td>111.4776</td></tr><tr><td>Total</td><td>675.78</td><td>159.9124</td><td>835.693</td></tr></table></td><td>Land Area Breakup<table><tr><th>Description</th><th>Existing (Ha)</th><th>Area Proposed (Ha)</th><th>Total (Ha)</th></tr><tr><td>Main Plant</td><td>98.340</td><td>46.592</td><td>144.932</td></tr><tr><td>Ash Pond</td><td>160.00</td><td>60.000</td><td>220.000</td></tr><tr><td>Sub Total (Plant & Ash Dyke)</td><td>258.34</td><td>106.592</td><td>364.932</td></tr><tr><td>Green Belt</td><td>110.47</td><td>39.660</td><td>150.130</td></tr><tr><td>Green Belt (%) of Main Plant & Ash Dyke Area</td><td>42.76</td><td>37.21</td><td>41.14</td></tr><tr><td>Township</td><td>55.210</td><td>0</td><td>55.210</td></tr><tr><td>Railway siding, MGR, Outside drains etc.</td><td>159.150</td><td>0</td><td>159.150</td></tr><tr><td>Raw water Reservoir</td><td>12.000</td><td>13.660</td><td>25.660</td></tr><tr><td>Others (Misc. areas in roads/periphery, office/Store</td><td>80.610</td><td>0</td><td>80.610</td></tr></table></td><td>The area under Railway corridor, MGR, Reservoir, Make-up Water Pump House, Storm Water Drains, Peripheral Road and Stores etc., were not mentioned separately and were included under Main Plant area was inadvertently. Area wise breakup has been mentioned in the revised table.</td></tr>
</table>

<table>
<tr><th>Condition no.</th><th>Details of Conditions as per TOR</th><th>Amendment Sought</th><th>Justification</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>s, make up water pump House etc.)</td><td></td><td></td><td></td></tr>
<tr><td>Total</td><td>675.780</td><td>159.912</td><td>835.692</td></tr>
</table>
*In addition to above green belt, 1.0 lakh tree plantation shall be carried out outside project area.</td><td></td></tr>
<tr><td>4 (ii)</td><td>Breakup of land use of TPP Site
<table>
<tr><th>Nature of land Involved in (Ha)</th><th>Area Existing in Ha (X)</th><th>Additional Area Proposed in Ha (Y)</th><th>Total Area require after expansion in Ha (X+Y)</th></tr>
<tr><td>Non-Forest Land (A)</td><td>661.830</td><td>105.049</td><td>766.88</td></tr>
<tr><td>Forest Land (B)</td><td>13.950</td><td>54.863</td><td>68.813</td></tr>
<tr><td>Total (A+B)</td><td>675.780</td><td>159.912</td><td>835.693</td></tr>
</table></td><td>Breakup of land use of TPP Site
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<tr><td>Non-Forest Land (A)</td><td>622.700</td><td>94.611</td><td>717.311</td></tr>
<tr><td>Forest Land (B)</td><td>53.080</td><td>65.301</td><td>118.381</td></tr>
<tr><td>Total (A+B)</td><td>675.780</td><td>159.912</td><td>835.692</td></tr>
</table></td><td>Darlipali STPP Stage-I: Total area was 675.780 Ha
• The land break up was mentioned as 661.830 Ha non-forest land and 13.95 Ha Forest land.
• However, actual land breakup of the same patch is 622.700 Ha and 53.080 Ha as non-forest and forest land respectively.

Darlipali STPS proposed Stage-II expansion: Total area : 159.912 Ha
• The land break up was mentioned as 105.049 Ha. non-forest land and 54.863 Ha Forest land.
• Accordingly, FC proposal for the forest land involved i.e. 54.863 Ha was submitted at the time of ToR.
• Subsequently on verification by State Revenue and Forest Department, the type of land was</td></tr>
</table>

Condition no.	Details of Conditions as per TOR	Amendment Sought	Justification
			found to be of forest land area of 65.301 Ha and non-forest land area of 94.611 Ha, without change in total land area involved in Stage-II expansion i.e. 159.912 Ha. • Accordingly, the Forest diversion proposal for 65.301 Ha has been submitted.
The land use for the stage-1 (2 x 800 MW) and for the proposed Stage-II (1 x 800 MW) is 675.780 ha and 159.912 ha, respectively.			

Details of Land and facilities of the stage-I and proposed stage-II project: The land and the facilities of the stage-I and the proposed stage-II project falling under the two districts namely Sundergarh and Jharsuguda District of Odisha State are as follows:

Descri-ption	STAGE-I (2X800 MW)-EXISTING				STAGE-II(1X800 MW)- PROPOSED							
	Existing (Ha)	District	Tehsil	Village	Area Already acquired (Ha)	District	Tehsil	Village	Area to be acquired (Ha)	District	Tehsil	Village
Main plant	98.340	Sundar-garh	Lephri-pada	Darli-pali	26.812	Sundar-garh	Lephri-pada	Darli-pali	19.780	Sundar-garh	Lephri-pada	Darli-pali
Township	55.210	Sundar-garh	Lephri-pada	Darli-pali	--	--	--	--	--	--	--	--
Ash pond	160.000	Sundar-garh	Lephri-pada	Darli-pali	12.460	Sundar-garh	Lephri-pada	Darli-pali	22.922	Sundar-garh	Lephri-pada	Darli-pali
									24.618	Jharsu-guda	Jharsu-guda	Tilei-mal
Railway siding, MGR, Outside drains etc.	150.250	Sundar-garh	Lephri-pada	Darli-pali, Raidihi	--	--	--	--	--	--	--	--
			Hemgir	Chua-bahal, Kala-megha, Laikera, Bihajor								

Descri-ption	STAGE-I (2X800 MW)-EXISTING				STAGE-II(1X800 MW)- PROPOSED							
	Existing (Ha)	**District**	**Tehsil**	**Village**	**Area Already acquired (Ha)**	**District**	**Tehsil**	**Village**	**Area to be acquired (Ha)**	**District**	**Tehsil**	**Village**
				, Kanaktura								
	8.900	Jharsu-guda	Jharsu-guda	Chich-inda, Kecho-bahal	--	--	--	--	--	--	--	--
Raw water reservoir	12.000	Sundar-garh	Lephri-pada	Darli-pali	--	--	--	--	13.660	Sundar-garh	Lephri-pada	Darli-pali
Others (Misc. areas in roads/periphery, office/Stores, make up water pump House etc.)	77.480	Sundar-garh	Lephri-pada	Darlipali	--	--	--	--	--	--	--	--
	3.130	Jharsu-guda	Lakhan-pur	Chhadarama	--	--	--	--	--	--	--	
Green Belt	110.470	Sundar-garh	Lephri-pada	Darlipali, Raidihi	--	--	--	--	25.250	Sundar-garh	Lephri-pada	Darli-pali
									14.410	Jharsu-guda	Jharsu-guda	Tilei-mal
District wise total land	663.75	Sundar-garh			39.272	Sundargarh			81.612	Sundar-garh		
	12.030	Jharsu-guda							39.028	Jharsu-guda		
Total (Ha)	675.78				39.272				120.64			
Grand Total (Ha)	**675.78**				**159.912**							

28.9.7: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration shall be furnished.

A. Summary of court cases

There are total 9 case related with Darlipali STPP Stage-I, out of these 04 cases are related with Land Acquisition, 03 Cases related to Contractual disputes, 01 Injunction Suit, 01 case related with

Environment Matter which is related with Orissa Human Rights Commission and its details are as given bellow:

S. N	Case No/ Title	Name of the Court	Brief summary of the case	Last Date of Hearing	Next date of Hearing	Direction/Action taken by the PP
1.	OHRC Case No. 3888 of 2024 (2952/OHRC, dated 18.02.2025)	Orissa Human Rights Commission	The complainant alleges that NTPC is violating human rights by polluting the environment in the Sundargarh district, causing health hazards due to emissions from vehicles and chimneys of the power plant. Complaint states that there is no development in the area since the establishment of project.	22.07.2025	30.10.2025	Comprehensive Reply has been submitted by NTPC on all the issues raised by the complainant along with documentary evidence. On last date, i.e. 22.07.2025, petitioner has submitted its reply on NTPC written submission. Now, NTPC has to file reply on petitioner's submission.

B. **Summary of Show Cause Notices:** 01 no.

S. N.	Issuing authority	Date	Reasons for issuance of SCN	Status of reply to submission	Present status
1	Odisha State Pollution Control Board	19.07.2025	Illegal dumping of Ash	Reply submitted to OSPCB on 23.07.2025	Case is under consideration for personal Hearing in OSPCB.

C. **Summary of violation**

Any violation case pertaining to the project following, i. The Environmental Protection Act, 1986 ii. Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980	• No Violation • Observations have been raised by the MOEF & CC, regarding taking up construction of Make-up Water Pipeline and the 132 KV Transmission line without obtaining Stage-II approval/ working permission for diversion of 25.56 ha of forest land. • It is submitted that the Stage-I approval was accorded on 01.11.2016

	and after compliance of the conditions laid down under Stage-I approval, the final (Stage-II) approval, has been accorded by the MOEF &CC on 24th April 2025, vide letter no 5-ORC279/2016-BHU.
iii. The Wildlife (Protection) Act, 1972	• No Violation

Written submission

28.9.8: PP vide letter dated 14.08.2025 has submitted the written information regarding the reduction in Ash Pond area from 80 ha to 60 Ha for proposed Darlipali STPP Stage-II expansion project and revised land use breakup as mentioned below-

S No	Description	Existing (Ha)	Area Proposed (Ha)	Total (Ha)
1	Main Plant	98.340	46.592	144.932
2	Ash Pond	160.00	60.000	220.000
	Sub Total (Plant & Ash Dyke)	258.34	106.592	364.932
3	Green Belt	110.47	39.660	150.130
	Green Belt (%) of Main Plant & Ash Dyke Area	42.76	37.21	41.14
4	Township	55.210	0	55.210
5	Railway siding, MGR, Outside drains etc.	159.150	0	159.150
6	Raw water Reservoir	12.000	13.660	25.660
7	Others (Misc. areas in roads/periphery, office/Stores, make up water pump House etc.)	80.610	0	80.610
	Total	675.780	159.912	835.692

Note: *In addition to above green belt, 1.0 lakh tree plantation shall be carried out outside project area.*

Observations and Deliberations of the Committee

28.9.9: The Committee noted the following:

i. Instant proposal is for amendment in the ToR dated 17/04/2023 and its amendment dated 13/11/2023 for including Air Cooled Condenser in place of water cooled condenser and its related amendment. Further, amendment also been sought land use break up for the project site as well as TPP.

ii. As per the ToR & its amendment accorded by MoEF&CC, project site falls under village Darlipali, Taluk Lephripara, District Sundergarh, Orissa, whereas as per the application submitted project site falls in two Districts namely Sundergarh and Jharsuguda. Now, the PP has submitted the instant proposal for amendment in ToR dated 17/04/2023 with inclusion of land/facilities details in Sundergarh and Jharsuguda Districts.

iii. Baseline data has been collected during April to June 2023.

iv. Public hearing has already been conducted at two Districts of Odisha i.e., Jharsudua and Sundergarh on dated Date 22.10.2024 and 04.11.2024, respectively.
v. EAC suggested for additional outside plantation to sequester the carbon dioxide.
vi. EAC suggested to reduce the proposed ash disposal area and increase the green belt provision. PP shall explore the advance technology of dry ash handling system to reduce the ash pond area.
vii. There are total 9 case related with Darlipali STPP Stage-I, out of these 04 cases are related with Land Acquisition, 03 Cases related to Contractual disputes, 01 Injunction Suit, 01 case related with Environment Matter which is related with Orissa Human Rights Commission. One show cause notice has been issued by the Odisha State Pollution Control Board regarding the Illegal dumping of Ash and the same is under consideration for personal Hearing in OSPCB.
viii. EAC deliberated the written information submitted by the PP and found it satisfactory.

Recommendation of EAC

28.9.10 In view of the foregoing and after detailed deliberations, the committee ***recommended*** the instant proposal for grant of following amendment in ToR dated 17/04/2023 **subject to uploading of written submisisons**, as detailed below subject to stipulation of following additional specific ToRs. All Other terms and conditions prescribed in ToR dated 17/04/2023 and 13/11/2023 shall remain unchanged:

Condition no.	Details of Conditions as per TOR	Recommendations of the EAC
Subject	Expansion of Darlipali Super Coal Based Thermal Power Project by installing 1x800 MW (Stage-II) project in existing project (2x800 MW) at village Darlipali, Taluk Lephripara, District Sundergarh, Odisha by M/s NTPC Limited-Term of Reference (ToR)-reg.	**Agreed to make the change in subject as mentioned below.** Expansion of 2x800 MW (Stage-I) Darlipali Supercritical Coal Based Thermal Power Plant by Addition of One Unit of 800 MW [1x800MW(Stage-II) Darlipali Super Thermal Power Project] at Village Darlipali, Raidihi, in Lephripara Tehsil, Village Chuabahal, Kalamegha, Laikera, Bihajor, Kanaktura in Hemgir Tehsil of Sundergarh District and Village Tileimal, Chichinda, Kechobahal, in Jharsuguda Tehsil and Village Chhadarama in Lakhanpur Tehsil of Jharsuguda District in Odisha by M/s NTPC Limited -Term of Reference(ToR)-reg.
4 (ii)	**Water Requirement:** Quantity of water Requirement: 2400 m^3/hr Cooling System: Water Cooled condenser system	**Agreed** Concerning the change in condition 4(ii) of ToR dated 17/04/2023 Committee recommended to amend the condition no.4(ii) as follows: **Water Requirement:** Quantity of water Requirement: 930 m^3/hr Cooling System: Air Cooled condenser system

4 (ii)

Land Area Breakup

Description	Existing (Ha)	Proposed (Ha)	Total (Ha)
Main Plant	322.534	45.3248	367.8588
Township	62.3216	0	62.3216
Ash Pond	160	80	240
Railway siding, corridors etc.	54.035	0	54.035
Green Belt	76.89	34.587	111.4776
Total	675.78	159.9124	835.693

Agreed

Concerning the change in condition 4(ii) of ToR dated 17/04/2023 Committee recommended to amend the condition no.4(ii) as follows:

Land Area Breakup

Description	Existing (Ha)	Area Proposed (Ha)	Total (Ha)
Main Plant	98.340	46.592	144.932
Ash Pond	160.00	60.000	220.000
Sub Total (Plant & Ash Dyke)	258.34	106.592	364.932
Green Belt	110.47	39.660	150.130
Green Belt (%) of Main Plant & Ash Dyke Area	42.76	37.21	41.14
Township	55.210	0	55.210
Railway siding, MGR, Outside drains etc.	159.150	0	159.150
Raw water Reservoir	12.000	13.660	25.660
Others (Misc. areas in roads/periphery, office/Stores, make up water pump House etc.)	80.610	0	80.610
Total	675.780	159.912	835.692

Note-In addition to above green belt, 1.0 lakh tree plantation shall be carried out outside project area.

4 (ii)

Breakup of land use of TPP Site

Nature of land Involved in (Ha)	Area Existing in Ha (X)	Additional Area Proposed in Ha (Y)	Total Area require after expansion in Ha (X+Y)
Non-Forest Land (A)	661.830	105.049	766.88
Forest Land (B)	13.950	54.863	68.813
Total (A+B)	675.780	159.912	835.693

Concerning the change in condition 4(ii) of ToR dated 17/04/2023 Committee recommended to amend the condition no.4(ii) as follows.

Breakup of land use of TPP Site

Nature of land Involved in (Ha)	Area Existing in Ha (X)	Additional Area Proposed in Ha (Y)	Total Area require after expansion in Ha (X+Y)
Non-Forest Land (A)	622.700	94.611	717.311
Forest Land (B)	53.080	65.301	118.381
Total (A+B)	675.780	159.912	835.692

The land and the facilities of the stage-I and the proposed stage-II project falling under the two districts namely Sundergarh and Jharsuguda District of Odisha State are as follows:

Descri	STAGE-I (2X800 MW)- EXISTING	STAGE-II(1X800 MW)- PROPOSED

-ption	Existing (Ha)	District	Tehsil	Village	Area Already acquired (Ha)	District	Tehsil	Village	Area to be acquired (Ha)	District	Tehsil	Village
Main plant	98.340	Sundar-garh	Lephri-pada	Darli-pali	26.812	Sundar-garh	Lephri-pada	Darli-pali	19.780	Sundar-garh	Lephri-pada	Darli-pali
Township	55.210	Sundar-garh	Lephri-pada	Darli-pali	--	--	--	--	--	--	--	--
Ash pond	160.000	Sundar-garh	Lephri-pada	Darli-pali	12.460	Sundar-garh	Lephri-pada	Darli-pali	22.922	Sundar-garh	Lephri-pada	Darli-pali
									24.618	Jharsu-guda	Jharsu-guda	Tilei-mal
Railway siding, MGR, Outside drains etc.	150.250	Sundar-garh	Lephri-pada	Darli-pali, Raidihi	--	--	--	--	--	--	--	--
			Hemgir	Chua-bahal, Kala-megha, Laikera, Bihajor, Kanaktura								
	8.900	Jharsu-guda	Jharsu-guda	Chich-inda, Kecho-bahal	--	--	--	--	--	--	--	--
Raw water reservoir	12.000	Sundar-garh	Lephri-pada	Darli-pali	--	--	--	--	13.660	Sundar-garh	Lephri-pada	Darli-pali
Others (Misc. areas in roads/periphery, office/Stores, make up water pump House etc.)	77.480	Sundar-garh	Lephri-pada	Darlipali	--	--	--	--	--	--	--	--
	3.130	Jharsu-guda	Lakhan-pur	Chhadarama	--	--	--	--	--	--	--	
Green Belt	110.470	Sundar-garh	Lephri-pada	Darlipali, Raidihi	--	--	--	--	25.250	Sundar-garh	Lephri-pada	Darli-pali
									14.410	Jharsu-guda	Jharsu-guda	Tilei-mal
District wise total land	663.75	Sundar-garh			39.272	Sundargarh			81.612	Sundar-garh		
	12.030	Jharsu-guda							39.028	Jharsu-guda		
Total (Ha)	675.78				39.272				120.64			
Grand Total (Ha)	**675.78**				**159.912**							

Additional Specific ToRs

i. Proponent shall submit action plan for carrying out 1.0 lakh additional tree plantation outside the project site as committed in addition to the prescribed 33% of the total plant area. The details of the area outside the project site, acquisition status, criteria for monitoring of green belt development shall also be submitted.
ii. PP shall also adopt Miyawaki plantation technique and plantation with minimum 2 meter height of the saplings in upcoming monsoon season.
iii. Project proponent shall submit action plan for dry ash handling system for the proposed expansion project and detail shall be submitted.
iv. Stage I FC (or) status of stage I FC 65.301 ha of forest land shall be submitted as per the MoEF&CC O.M. dated 9/09/2011 & its amendment.

Agenda No: 28.10

28.10: Proposed Expansion by addition of 2x800 MW (1600 MW) Coal Based Ultra Super Critical Thermal Power Plant to existing 2x630 MW (1260 MW) by **M/s. MB power (Madhya Pradesh) Limited** located at village Laharpur, Murra, Guwari, Belia & Jethari, in Jaithari Tehsil, **Anuppur District, Madhya Pradesh - Environmental Clearance-regarding.**

[Proposal no. IA/MP/THE/540868/2025, F.No. J-13012/99/2008-IA. II(T)]

28.10.1: M/s. MB Power (Madhya Pradesh) Limited has made an online application vide proposal no. IA/MP/THE/540868/2025 Dated 23/07/2025 along with copy of EIA/EMP report, Form and Certified compliance report seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at item no. ***1(d)*** **Under Category "A"** of the schedule of the EIA Notification, 2006 and attracts general condition and appraised at Central Level.

Name of EIA consultant: M/s Greencindia Consulting Limited [S. No. NABET/EIA/2326/RA 0297 List of ACOs with their Certificate / Extension Letter no QCI/NABET/ ENV/ACO/ 23/2862; Valid up to 22.02.2026].

Details of the proposal, as ascertained from the proposal documents and as revealed from the discussions held during the meeting, are given as under:

28.10.2: The proposed project is for expansion of existing project of M/s MB Power (Madhya Pradesh) Limited from 1,260 MW (2x630 MW) to 2,860 MW with addition of 2 Units of 800 MW each (2x800 MW) located in Laharpur, Murra, Guwari, Belia & Jaithari Village, Jaithari Tehsil, Anuppur District, Madhya Pradesh.

28.10.3: The Environment Clearance for 2 x 600 MW in the name of M/s. Moser Baer Power & Infrastructure Limited was obtained vide letter no. J-13012/99/2008-IA.II(T) dated 28.05.2010. Corrigendum in EC was issued dated 01/09/2010 w.r.t involvement of forest land and its diversion.

Forest Clearance details

For 37.875 ha (93.6 acres) forest land coming under revenue forest land

- Stage 1 – Vide letter no. 6MPCo51/2009-BHO/1032 dated 04.06.2010.
- Stage 2 – Vide letter no. 6MPC051/2009-BHO/3598 dated 17.08.2011.
- Transfer of EC - From "M/s Moser Baer Power & Infrastructure Ltd.," to "M/s. MB Power (Madhya Pradesh) Ltd" vide letter no. J-13012/99/2008-IA.II(T) dated 23.11.2010.

Thereafter, Environment Clearance (Under clause 7(ii)(a)) -obtained for 2 x 630 MW in the name of M/s MB Power (Madhya Pradesh) Ltd. vide letter no. J-13012/99/2008-IA.II(T) dated 07.05.2024. Consent to Operate (CTO) for the existing unit was accorded by Madhya Pradesh State Pollution Control Board vide lr. No. AW-61310 dated 05.11.2024. The validity of CTO is up to 31.03.2026.

28.10.4: Implementation status of the existing ECs dated 28/05/2010 & 07/05/2024

S. No.	Configuration	Capacity (MW)	As per EC dated	Implementation Status as on 28.07.2025	Production as per CTO
1	2x630	1260	28.05.2010 and 07.05.2024	Project is operational for complete components/ units envisaged in the EC	1260 MW

28.10.5: Certified compliance report from Regional Office: The Status of compliance of earlier EC was obtained from Regional Office, Bhopal vide letter no. 4-15/2010, dated 10.05.25 in the name of M/s M B Power (Madhya Pradesh) Limited. The Action taken report regarding the partially/non-complied conditions was submitted to Regional office, MoEF&CC, Bhopal vide letter no. MBPMPL/EHS/MoE&CC/2025-26/175 dated 25.06.2025. MoEF&CC (RO), Bhopal evaluated the same and has issued letter dated 11.07.2025. The details of the observations made by RO in the report dated 11.07.2025 along with its re-assessment / present status as furnished by the PP is given as below.

S. No.	Non- compliances details	Observation of RO (abridged)	Condition no.			Re-assessment by RO / Response by PP
			EC date	Specific	General	
1	The budget earmarked for the plantation shall be kept in a separate account and audited annually. PP should annually submit the audited statement of expenditure along with proof of activities viz. photographs (before &after with geolocation date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC and on PARIVESH Portal as the case may be for the activities carried out during previous year.	Project Proponent submitted expenditure statement for plantation. Audited statement is awaited. Plantation photos are available. **Partly Complied**	28.05.2010 & 07.05.2024	1.9		Project proponent has engaged an organisation for environmental audit. The report is to be received as an audited statement/report. Hence, it is considered that compliance is in progress. **Compliance in Progress**
2	A vision document comprising prospective plan for implementation of	Vision document on the policy frame work,	28.05.2010 & 07.05.2024	2.1		Revised Vision Document incorporating the said activities is

S. No.	Non- compliances details	Observation of RO (abridged)	Condition no.			Re-assessment by RO / Response by PP
			EC date	Specific	General	
	various CER activities, plantation programme outside the project cover area, rejuvenation, and conservation of water bodies within 5km radius of the project cover area, creation of sacred groves etc. shall be prepared and submitted to the Regional Office of the Ministry within 6 months. Implementation status of the same shall be reported	have been prepared. It is advised to prepare the vision document on creation of basic amenities, conservation and rejuvenation of natural resources based on the studies being conducted on water conservation and ecology/biodiversity. **Partly Complied**				submitted. PP has to submit the implementation status in subsequent six-monthly compliance reports. **Compliance In Progress**
3	Epidemiological Study among population within 5 km radius of project cover area shall be carried out on regular interval (Once in two year) through independent agency. Necessary measures shall be taken as per findings of study in consultation with district administration. Action taken report shall be submitted to the Regional Office of the Ministry.	The documentary evidence shows that consultant has been engaged vide their service order dated 13.02.2025. Accordingly, it is observed that the study is under progress. **Partly Complied**	28.05.2010 & 07.05.2024	2.2		EMTRC Consultants LLP (March, 2025) is submitted. PP has to implement the recommendations and its implementation status to be reported in subsequent six-monthly compliance reports. **Compliance In Progress**
4	The recommendation from Standing Committee of NBWL under the Wildlife (Protection) Act, 1972 should be obtained, if applicable	Based on the report of DFO vide letter dated 29.01.2024, the condition **is not**	28.05.2010 & 07.05.2024		1.6	Approved Wildlife Conservation Plan by PCCF (Wildlife, Bhopal) is submitted. PP has to deposit the said amount with the

S. No.	Non- compliances details	Observation of RO (abridged)	Condition no.			Re-assessment by RO / Response by PP
			EC date	Specific	General	
		applicable. Not applicable.				concerned authority towards implementation of the plan and compliance status/ progress to be reported in subsequent six-monthly compliance reports. **Compliance In Progress**
5	Green belt shall be developed in an area of 33% of the total project with indigenous native tree species in accordance with CPCB guidelines. The green belt shall inter-alia cover an entire periphery of the plant.	Compliance is in progress	28.05.2010 & 07.05.2024		8.1	Approved Action plan by DFO, Anuppur is submitted. PP has to implement the action plan as per schedule and report the progress in six-monthly compliance reports. **Compliance In Progress**

In addition to the above, status of installation of Flue Gas Desulphurization has been furnished as per the MoEF&CC Notification dated 11/07/2025:

i. Categorization details of TPP: Category C
ii. Sulphur content of the coal to be fired in the boiler: will be <0.5%
iii. Status of FGD installation for existing unit:
   - Wet lime stone based FGD has been installed in existing 2x630 MW Units. The design condition for SOx emission at FGD outlet is less than 200 mg/Nm^3. A wet chimney has been installed at FGD outlet. FGD system is equipped with CEMS.
   - Unit-1 FGD has been commissioned in March'24
   - Unit-2 FGD has been commissioned in May'24
   - Both the FGDs are under operation.
iv. Action plan for installation of new stack in compliance to the notification number GSR 742 (E) dated the 30/08/1990 for the proposed expansion. A 275 m height Chimney will be constructed. Construction shall commence during FY '26 and expected completion by FY'29. The Chimney shall be in compliance to the notification number GSR 742 (E) dated the 30/08/1990 as per the notification dated 11/07/2025.

28.10.6: **The detail of the ToR is furnished as below:**

Proposal No. and date	Consideration	Details	Date of accord	ToR Validity
IA/MP/THE/502449/2024	16th meeting of EAC – Thermal held on 12.12.2024	Terms of Reference	28.12.2024	28.12.2028

28.10.7: **Environmental site settings:**

<table>
<tr><th>S. No.</th><th>Particulars</th><th>Details</th><th>Remarks</th></tr>
<tr><td>1.</td><td>Total land</td><td>451.202 Ha [Private: 346.379; Govt.: 66.948 Ha; Forest Land: 37.875 Ha]</td><td></td></tr>
<tr><td>2.</td><td>Land use break up</td><td>
<table>
<tr><th>Facilities</th><th>Area for 2x630 MW - PH-1 (In Ha)</th><th>Area for 2x800 MW - PH-2 (In Hectares)</th><th>Total Area for - PH-1 & PH-2 (In Ha)</th></tr>
<tr><td colspan="4">I. Land available within existing plant boundary</td></tr>
<tr><td>Plant Area</td><td>109.717</td><td>69.506</td><td>179.223</td></tr>
<tr><td>Reservoir</td><td>44.534</td><td>8.98</td><td>53.514</td></tr>
<tr><td>Ash Pond</td><td>6.68</td><td>7.692</td><td>14.372</td></tr>
<tr><td>Green belt (main plant)*</td><td>102.637</td><td>41.529</td><td>144.166</td></tr>
<tr><td>Misc infrastructure</td><td>8.097</td><td>2.024</td><td>10.121</td></tr>
<tr><td>Colony</td><td>16.599</td><td>0</td><td>16.599</td></tr>
<tr><td>Sub Total area within plant boundary - A</td><td>288.264</td><td>129.731</td><td>417.996</td></tr>
<tr><td colspan="4">II. Additional Area</td></tr>
<tr><td>Land for future use</td><td></td><td>11.579</td><td>11.579</td></tr>
<tr><td>Area for Railway line</td><td></td><td>14.462</td><td>14.462</td></tr>
<tr><td>Green belt along railway line*</td><td></td><td>7.166</td><td>7.166</td></tr>
<tr><td>Sub Total area outside plant boundary - B</td><td></td><td>33.207</td><td>33.207</td></tr>
<tr><td>Total area for Phase-I & Phase-II - (A+B)</td><td colspan="2"></td><td>451.202</td></tr>
</table>
</td><td></td></tr>
<tr><td>3.</td><td>Land acquisition details as per MoEF&CC O.M. dated 7/10/2014 & 19/02/2025</td><td>Total land- 451.202 Ha
Non Forest land – 413.327 Ha
Forest Land- 37.875 Ha.
The Stage I & II forest clearance was granted vide letter no.- 6-MPCO51/2009- BHO/1032 & 6-MPC051/2009-BHO/3598, Dated 17.08.2011</td><td>417.996 Ha is within plant boundary. 33.206 Ha is proposed for expansion and same has been acquired. Land mutation documents for the said parcel of land is uploaded on Parivesh Portal.</td></tr>
</table>

<table>
<tr>
<td>4.</td>
<td>Existence of habitation & involvement of R&R, if any.</td>
<td><u>Project site</u>: Guwari
Study Area:
<table>
<tr><th>Habitation</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Guwari</td><td>0.25 km</td><td>North</td></tr>
<tr><td>Murra</td><td>0.21 km</td><td>East</td></tr>
</table>
Mitigation measures adopted are as follows.

Plantation in consultation will village panchayets.
Periodical (minimum Quarterly) health checkups.
Facilities of primary healthcare at Jaithari with enhancement of capacity.
Providing free medicines during health camps (seasonally)
Provision of Safe drinking water in educational facilities (Schools) present in these villages.
</td>
<td>R&R is not required.</td>
</tr>
<tr>
<td>5.</td>
<td>Existence of school and hospitals if any.</td>
<td>A. School

Project site: School name: Paramount Academy Eng. Med. Higher Secondary School

Study Area:
<table>
<tr><th>School</th><th>Distance</th><th>Direction</th></tr>
<tr><td>School name: Paramount Academy Eng. Med. Higher Secondary School</td><td>1.6 km</td><td>South-East</td></tr>
</table>
B. Hospital
Project site: Hospital name: Guwari CHSC
Study Area:
<table>
<tr><th>Hospital</th><th>Distance</th><th>Direction</th></tr>
<tr><td>Guwari CHSC</td><td>0.58 km</td><td>North West</td></tr>
</table>
Mitigation measures adopted are as follows.

FGD and De NOx is already installed for the existing plant.
Green Belt is present towards the East direction, and it is proposed to densify the existing green belt to 20 m width during the phase II. The greenbelt will be upgraded by planting additional air-purifying trees such as neem, banyan, and peepal in a dense green belt (thickness of green area 20m) between the power plant and the school to absorb pollutants and act as a dust barrier and noise barrier.
A dedicated AAQ station near school to monitor PM_{10}, $PM_{2.5}$, SO_2 and NOx will be set up.
Plantation will be taken up by MB power (Madhya Pradesh) Limited along the boundary of the school which will be further act as barrier.
</td>
<td></td>
</tr>
</table>

<table>
<tr>
<td>6.</td>
<td>Latitude and Longitude of all corners of the project site.</td>
<td>A. Plant site
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>A</td><td>23°4'26.01"N</td><td>81°46'24.16"E</td></tr>
<tr><td>B</td><td>23°4'33.83"N</td><td>81°46'43.33"E</td></tr>
<tr><td>C</td><td>23°4'31.71"N</td><td>81°47'5.72"E</td></tr>
<tr><td>D</td><td>23°4'18.91"N</td><td>81°47'26.59"E</td></tr>
<tr><td>E</td><td>23°4'31.21"N</td><td>81°47'47.48"E</td></tr>
<tr><td>F</td><td>23°4'42.33"N</td><td>81°48'0.23"E</td></tr>
<tr><td>G</td><td>23°4'34.40"N</td><td>81°48'21.17"E</td></tr>
<tr><td>H</td><td>23°4'15.43"N</td><td>81°48'20.61"E</td></tr>
<tr><td>I</td><td>23°04'1.40"N</td><td>81°48'17.87"E</td></tr>
<tr><td>J</td><td>23°3'53.38"N</td><td>81°48'0.61"E</td></tr>
<tr><td>K</td><td>23°3'48.83"N</td><td>81°47'36.15"E</td></tr>
<tr><td>L</td><td>23°3'39.39"N</td><td>81°47'24.95"E</td></tr>
<tr><td>M</td><td>23°3'29.16"N</td><td>81°47'45.76"E</td></tr>
<tr><td>N</td><td>23°3'15.58"N</td><td>81°47'33.29"E</td></tr>
<tr><td>O</td><td>23°3'14.09"N</td><td>81°47'26.06"E</td></tr>
<tr><td>P</td><td>23°3'25.63"N</td><td>81°47'17.5"E</td></tr>
<tr><td>Q</td><td>23°3'34.11"N</td><td>81°47'8.316"E</td></tr>
<tr><td>R</td><td>23°3'41.08"N</td><td>81°46'48.34"E</td></tr>
<tr><td>S</td><td>23°3'54.51"N</td><td>81°46'41.47"E</td></tr>
<tr><td>T</td><td>23°04'4.27"N</td><td>81°46'27.95"E</td></tr>
<tr><td>U</td><td>23°4'11.78"N</td><td>81°46'20.91"E</td></tr>
<tr><td>V</td><td>23°4'20.39"N</td><td>81°46'21.72"E</td></tr>
</table>
B. Area outside the project site
<table>
<tr><th>Point</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>I</td><td>23°3'47.38"N</td><td>81°48'52.42"E</td></tr>
<tr><td>II</td><td>23°3'48.71"N</td><td>81°49'09.96"E</td></tr>
<tr><td>III</td><td>23°3'39.16"N</td><td>81°49'13.33"E</td></tr>
<tr><td>IV</td><td>23°3'38.05"N</td><td>81°48'59.32"E</td></tr>
<tr><td>V</td><td>23°3'40.99"N</td><td>81°48'51.94"E</td></tr>
</table></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Elevation of the project site</td>
<td>502 M above mean sea level</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Involvement of Forest land if any.</td>
<td>Status of Stage I & II Forest Clearance: The forest clearance was granted vide letter no.- 6-MPCO51/2009-BHO/1032 Dated 04.06.2010 & 6-MPC051/2009-BHO/3598, Dated 17.08.2011

Area of the forest land involved: 37.875 Ha</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Water body (Rivers, Lakes, Pond, Nala, Natural Drainage, Canal etc.) exists within the</td>
<td>Project site:
Name: Nala diversion within plant boundary (350 m approx.)
Approval for proposed Nala diversion (350m approx.) has been obtained from WRD, Anuppur dated 25/10/2024.
Study area
<table>
<tr><td>Water body</td><td>Distance</td><td>Direction</td></tr>
</table></td>
<td>HFL for the Tipan River is 499 m vide WRD Letter dated: 19.11.2024.
Distance from</td>
</tr>
</table>

<table>
<tr><td></td><td>project site as well as study area</td><td>
<table>
<tr><td>Kiranr Nala</td><td>1</td><td>WSW</td></tr>
<tr><td>Tipan Nadi</td><td>1.6</td><td>WSW</td></tr>
<tr><td>Hansia Nala</td><td>Hansia Nala</td><td>Hansia Nala</td></tr>
<tr><td>Son River</td><td>4.7</td><td>NE</td></tr>
<tr><td>Koylar Nala</td><td>5</td><td>S</td></tr>
</table>
Plant site is at higher elevation (502 m) than the HFL of Tipan River (499m)</td><td>project site is 1.5 km approximately. There were no flooding incidents in Tipan River for the past 30 years.</td></tr>
<tr><td>10.</td><td>Existence of ESZ/ESA/ National park / wildlife sanctuary /biosphere reserve/ tiger reserve/ elephant reserve etc. if any within the study area</td><td>Study area: Nil
Name of the ESZ/ESA:NA
Status of Notification:NA
Distance of project from ESZ/ESA: NA Authenticated map of ESZ projecting distance of ESZ from project site: Status of NBWL approval: Not Required
List of Reserved and protected forests:
<table>
<tr><th>Name</th><th>Distance in Km</th><th>Direction</th></tr>
<tr><td>Lakhanpur RF</td><td>0.127</td><td>SE</td></tr>
<tr><td>RF</td><td>1.8</td><td>SE</td></tr>
<tr><td>Lakhanpur RF</td><td>2</td><td>SSW</td></tr>
<tr><td>Mauhari RF</td><td>2</td><td>NE</td></tr>
<tr><td>2 RF</td><td>3.5</td><td>S</td></tr>
<tr><td>Mauhari RF near Mahuari</td><td>3.6</td><td>NW</td></tr>
<tr><td>2 RF</td><td>5</td><td>NE</td></tr>
<tr><td>Kotma RF near Kukurgora</td><td>5.5</td><td>NNE</td></tr>
<tr><td>Maikala RF</td><td>5.8</td><td>SW</td></tr>
<tr><td>2 Kotma RF Rahilakachhar</td><td>5.9</td><td>ENE</td></tr>
<tr><td>Dahnadawra RF</td><td>6.9</td><td>S</td></tr>
<tr><td>5 PF, 1 RF</td><td>8.1</td><td>SE</td></tr>
<tr><td>2 PF</td><td>8.2</td><td>SSE</td></tr>
<tr><td>Kotma RF near Kukurgora</td><td>8.7</td><td>ENE</td></tr>
<tr><td>Lakhanpur RF</td><td>8.7</td><td>WSW</td></tr>
<tr><td>Mauhari RF near Bholgar</td><td>9.7</td><td>NW</td></tr>
<tr><td>Nigaura RF</td><td>10.4</td><td>SE</td></tr>
<tr><td>Rampur RF</td><td>10.7</td><td>N</td></tr>
<tr><td>Sulkhari RF</td><td>12.2</td><td>SSE</td></tr>
<tr><td>Munda RF</td><td>12.5</td><td>SE</td></tr>
<tr><td>Maikala RF</td><td>12.8</td><td>WSW</td></tr>
<tr><td>Bamni PF</td><td>13.1</td><td>NNE</td></tr>
<tr><td>Jareli RF</td><td>13.3</td><td>SE</td></tr>
<tr><td>RF, PF</td><td>13.6</td><td>SE</td></tr>
</table></td><td>NO Eco-sensitive Zone notified/ proposed to be notified are within the 10 km study area.</td></tr>
<tr><td>11.</td><td>Archaeological sites monuments/ historical temples etc.</td><td>No Archaeological sites/ monument/ historical temples are present in the project site.</td><td></td></tr>
</table>

12.	Involvement of Critically Polluted Area/ Severely Polluted area as per 2018 CEPI score	Involvement of CPA/SPA: Nil Proximity to CPA/SPA: NA	

28.10.8 The unit configuration and capacity of existing *and* proposed project is given as below:

S. No.	Existing power plant configuration and capacity	Proposed power plant configuration and capacity	Total	Technology adopted
1	2x630 MW	2x800 MW	2860 MW	Existing - Sub critical Proposed - Ultra Super Critical Thermal Power Plant

28.10.9: The details of the fuel (coal/gas/LDO) requirement for the proposed project/ expansion cum proposed project along with its source and mode of transportation is given as below:

Details	Fuel requirement (MTPA)	Source	Distance from site (Kms)	Mode of Transportation	Coal characteristics (Worst case scenario)	Linkage document
Existing TPP	6.17 MMTPA	SECL Coal Fields	250 km	Railway Siding	Ash - 39% Sulphur - < 0.5% Moisture- 15 % GCV – 3364 Kcal/Kg	The coal supply agreement between SECL Coal field and MBPMPL for 3893309 Tonnes coal has be acquired for Existing TPP
Proposed TPP	7.36 MMTPA	The coal will be sourced from CIL mines	250 km	Railway Siding	Ash – 39% Sulphur - < 0.5% Moisture - 15% GCV- 3200 – 3800 Kcal/Kg-	

28.10.10: Water requirement: Existing Water requirement is 68,400 m^3/day and it is obtained from Son River and permission for the same has been obtained from WRD, Govt. of Madhya Pradesh vide letter dated 16.05.2018. The water requirement for the proposed project is estimated as 1,08,000 m^3 /day, out of which 95,808 m^3/day of fresh water requirement will be obtained from the Son river and the remaining requirement of 12,192 m^3 /day will be met from the treated water from the plant. The permission for drawl of groundwater / surface water is obtained from WRD, Govt of Madhya Pradesh Dated 25-102024. The water will be transported to the plant site through Pipeline.

28.10.11: Power requirement: Existing power requirement of 75.6 MW (Aux. power approx. 6 %) is obtained from Phase I (2×600MW) The power requirement for the proposed project is estimated as 96 MW, which will be obtained from the Phase II(2×630MW).

28.10.12: Baseline Environmental Studies

Period	October, November & December 2024 (Post Monsoon)	Additional study (if any)
AAQ parameters at 9 Locations (min and	$PM_{2.5}$ = 23.59 µg/m^3 to 42.04 µg/m^3 PM_{10} = 52.44 µg/m^3 to 76.23 µg/m^3 SO_2 = 9.43 to16.66 µg/m^3 Nox = 13.53 to 19.86 µg/m^3	

<table>
<tr><th>Period</th><th>October, November & December 2024 (Post Monsoon)</th><th>Additional study (if any)</th></tr>
<tr><td>max)</td><td></td><td></td></tr>
<tr><td>Incremental GLC level</td><td>PM_{10} =1.56 µg/m^3 (Level at 1.2 km in SSE Direction)
SO_2 = 37 µg/m^3 (Level at 1.2 km in SSE Direction)
Nox = 5.20 µg/m^3 (Level at 1.2 km in SSE Direction)</td><td></td></tr>
<tr><td>Ground water quality at 07 locations</td><td>pH: 6.78 to 7.54, Total Hardness: 132.11 to 276.22 mg/l, Chlorides: 32.04 to80.1 mg/l, Fluoride: 0.18 to 0.31 mg/l. Heavy metals like Cadmium, Chromium, Iron, Copper, Lead Mercury were found to be below detection limits. Iron in the range of 0.11 to 0.27.</td><td></td></tr>
<tr><td>Surface water quality at 10 locations</td><td>pH: 6.81 to 7.71; DO: 6.5 to 7 mg/l and BOD: <2 to 6.2 mg/l. COD from < 10 to 16.2 mg/l. Heavy metals like Cadmium, Chromium, Iron, Copper, Lead Mercury were found to be below detection limits. Iron in the range of 0.14 to 0.3. Coliform was absent in Ground water samples.</td><td></td></tr>
<tr><td>Effluent generation details and its treatment</td><td>Effluent generation from TPP- 12,192 KLD
Mode of treatment & reuse- ETP of Capacity 12,200 KLD
Domestic wastewater generation – 55.2 KLD
Mode of treatment & reuse- STP/ETP - STP of Capacity 130 KLD.
Zero liquid discharge will be adopted.</td><td></td></tr>
<tr><td>Noise levels Leq (Day and Night)</td><td>51.4 dB(A) to 62.4 dB(A) for the daytime and 42.2 dB(A) to53.1 dB(A) for the Nighttime.</td><td></td></tr>
<tr><td>Traffic assessment study findings</td><td>• Traffic study has been conducted at Pendra Road which is approximately 0.3 km (distance) from the plant site.
• Transportation of raw material will be done 100 %. by rail.
• Existing PCU is 116.8 PCU/hr on Pendra Road and existing level of service (LOS) is: A
• PCU load after proposed project will be 116.8 (Existing) + 19.8 (Additional) PCU/hr and level of service (LOS) will be: A
<table>
<tr><th>Road</th><th>V (Volume in PCU/hr.)</th><th>C (Capacity in PCU/hr.)</th><th>Existing V/C Ratio</th><th>LOS</th></tr>
<tr><td>Pendra Road</td><td>116.8</td><td>625</td><td>0.1868</td><td>A</td></tr>
</table>
* ***Note****: Capacity as per IRC 064-1990 Guideline for capacity for roads.*
<table>
<tr><th>Road</th><th>V (Volume in PCU/hr.)</th><th>C (Capacity in PCU/hr.)</th><th>Proposed V/C Ratio</th><th>LOS</th></tr>
<tr><td>Pendra Road</td><td>136.6</td><td>625</td><td>0.218</td><td>A</td></tr>
</table>
Conclusion: The level of service will remain same i.e., A: Condition of free flow after including additional traffic due to proposed project.

Additional Study done by EMTRC Consultant projected that</td><td>Number of HCVs (Trailer and Bulkers) used for transportation of Ash are- 138- 145/ day. The transportation route used for the bulkers to transport ash is via Pendra road. The traffic study conducted for the baseline was on Pendra road and the trucks were included in the study. The Level of Service of the Pendra Road will remain ‘A’ in free flow state.

Additional Traffic Impact Assessment was conducted by EMTRC Consultants LLP. The report showed that the</td></tr>
</table>

Period	October, November & December 2024 (Post Monsoon)	Additional study (if any)
	total volume will be 1.28 times of the existing volume which is worst case scenario on the day railway siding is not functional and MBPMPL confirms that railway siding will be functional. Hence the LOS will remain A: Condition of free flow.	concentration of CO and NOx will increase significantly if transported by road. To mitigate the predicted results, Fly ash transportation will be primarily through railways. In this regard 4 Nos of silos are being constructed for loading the fly ash into railway wagons for transportation to cement plants. Approximately 80% reduction in road transport of ash is expected. This will reduce the road transportation of ash which in terms will reduce the emission load.
Soil Quality at 8 Locations	**Bulk density**: 1.22 to 1.41 gm/cm^3; pH range 7.36 to 7.81; Electrical conductivity (EC); 112 to 210 µmhos/cm; calcium content: 48.71 to 67.26 mg/kg; potassium: 92.1to 205.4 kg/ha; Nitrogen: 124.26 to 244.8kg/ha; Phosphorous: 26.48 to 47.26kg/ha Cation Exchange **Capacity (CEC)**: 11.2 to 15.4 meq/100gm; Magnesium: 18.26 to 34.81mg/kg; Organic Carbon: 0.51 to 1.02 %	
Flora and fauna	Floral Study: During the survey, an inventory of the various plant groups discovered in the study region was created. 19 Near Threatened species, 24 vulnerable species, 7 Endangered species & 2 Critically Endangered species were identified in the study area. In the research region, 192 species of flora were identified. Out of which 85 species of trees and small trees,19 species of Grasses, 29 species of Climbers, 24 species of Shrubs & 36 species of Herbs have been recorded in the study area based on primary observation as well as based on information collected from the secondary data. Faunal Study: Schedule-I species were found during the field survey within 10 km radius of the plant site. Though in public consultation mention of multiple Schedule I species like Elephant, Jackle Leopard were mentioned. A number of faunal terrestrial species comprising mammals, avi fauna, reptiles, Amphibians & fishes were recorded from the study area.	The Wildlife Conservation plan was approved by PCCF, Madhya Pradesh vide letter no- व. प्रा/ व. त. अ.-1/Mine-230/5113 dated 12.06.2025

<table>
<tr><td>Period</td><td colspan="5">October, November & December 2024 (Post Monsoon)</td><td>Additional study (if any)</td></tr>
<tr><td></td><td colspan="5">Among fauna, 26 species of mammals, 81 species of avi fauna, 45 species of reptiles, 23 species of amphibians & 14 species of fishes were recorded from the study area.</td><td></td></tr>
<tr><td>Hydrogeology study</td><td colspan="5">Recommendations of Hydrogeology study:
<table>
<tr><th>S. No.</th><th>Activity Description</th><th>Quantity</th><th>Implementation Steps & Monitoring Responsibility</th><th>Tentative time Period</th></tr>
<tr><td>1</td><td>Afforestation in identified area in the Bank of Son River</td><td>4 Ha</td><td>Environmental Cell and project team</td><td>within 5 years</td></tr>
<tr><td>2.</td><td>Groundwater recharge and water conservation measures: Farm ponds, recharge pits, trenching, check & stop dams</td><td>4 Nos. Farm ponds
4 Nos recharge pits
7 Nos check dams
2 Nos stop dams</td><td>Hydrogeologist and project team</td><td>Item mentioned under a & b within 3 years
Item mentioned under c & d within 4 years</td></tr>
<tr><td>3</td><td>HDPE/LDPE lining in ash ponds areas and Construction of embankments and leachate collection systems to prevent groundwater contamination</td><td>Ash pond and handling area</td><td>Hydrogeologist and project team</td><td>During construction of ash pond (4 years)</td></tr>
<tr><td>4</td><td>Groundwater quality monitoring of common parameters: heavy metals, TDS, and pH etc.</td><td>4 times a year</td><td>Environmental Cell and project team</td><td>Quarterly</td></tr>
<tr><td>5</td><td>Implementation of Other required measures to prevent environmental pollution, if any.</td><td>According to requirement</td><td>Environmental Cell and project team</td><td>Time- to-time based on requirement.</td></tr>
</table></td><td>The Hydrology and Hydrogeological study were conducted by M/s. Centre for Ground Water Recharge in association with Department of Hydrology, IIT Roorkee.</td></tr>
<tr><td>Impact study on bio-diversity and aquatic</td><td colspan="5">The analysis of the survey data reveals that 33 species are in Schedule I of the Wildlife Protection Act of India. Out of theses 33 species, animal classes are distributed among Mammals 14, 2 Birds, 16 Reptiles and 1 Amphibian. Action</td><td>Biodiversity analysis study conducted by Indira Gandhi</td></tr>
</table>

<table>
<tr><th>Period</th><th>October, November & December 2024 (Post Monsoon)</th><th>Additional study (if any)</th></tr>
<tr><td>ecology</td><td>plan along with Rs 1.16 Cr is allocated for conservation of Biodiversity of the area.

Recommendations of study report:

<table>
<tr><td>S. No.</td><td>Activity</td><td>Estimated Budget (INR Lakhs)</td></tr>
<tr><td>1</td><td>Habitat Restoration (Afforestation & Grassland Development)</td><td>15</td></tr>
<tr><td>2</td><td>Wildlife Monitoring & Camera Traps</td><td>11</td></tr>
<tr><td>3</td><td>Human-Wildlife Conflict Mitigation (Fencing, Awareness Camps)</td><td>13</td></tr>
<tr><td>4</td><td>Anti-Poaching & Patrolling Measures</td><td>10</td></tr>
<tr><td>5</td><td>Community Engagement & Livelihood Support (Eco-tourism, Agroforestry)</td><td>12</td></tr>
<tr><td>6</td><td>Capacity Building & Training (Forest Guards, Local Youth)</td><td>5</td></tr>
<tr><td>7</td><td>Water Resource Management (Pond Creation, Check Dams)</td><td>12</td></tr>
<tr><td>8</td><td>Conservation Education & Awareness Campaigns</td><td>7</td></tr>
<tr><td>9</td><td>Biodiversity Corridor Development</td><td>10</td></tr>
<tr><td></td><td>Total</td><td>95</td></tr>
<tr><td>10</td><td>Escalation cost & unforeseen expenditure (20% of Estimated Cost)</td><td>19</td></tr>
<tr><td>11</td><td>Miscellaneous Administration & monitoring Expenses (2% of Estimated Cost)</td><td>1.9</td></tr>
<tr><td>12</td><td>Total Estimated Budget</td><td>115.9 Lakhs (1.16 Cr.)</td></tr>
</table>
</td><td>National Tribal University, Amarkantak.</td></tr>
<tr><td>Risk assessment study</td><td>Recommendations of Risk assessment report with mitigation measures

The preliminary risk assessment has been completed for the proposed power plant and associated facilities and the broad conclusions are as follows:

• There will be no significant community impacts or environmental damage consequences; and
• The hazardous event scenarios and risks in general at this facility can be adequately managed to acceptable levels by performing the recommended safety studies as part of detailed design, applying recommended control strategies and implementing a Safety Management System.

<u>Risk Reduction Opportunities</u>
• Buildings and plant structures designed for cyclone</td><td>Greencindia Consulting Pvt. Ltd, Ghaziabad.</td></tr>
</table>

Period	October, November & December 2024 (Post Monsoon)	Additional study (if any)
	and seismic events (where appropriate), • Provision for adequate water capacity to supply fire protection systems and critical process water; • Isolate people from load carrying/mechanical handling systems, vehicle traffic and storage and stacking locations; • Installation of fit-for-purpose access ways and fall protection systems to facilitate safe access to fixed and mobile plant; • Provision and integrity of process tanks, waste holding tanks and bunded areas as per relevant standards; • Containment of hazardous materials; Security of facility to prevent unauthorized access to plant, introduction of prohibited items, and control of onsite traffic; and Development of emergency response management systems commensurate with site specific hazards and risks (fire, explosion, rescue and first aid).	

28.10.13: Solid and hazardous waste management: The details of solid and hazardous waste generation along with its mode of treatment/disposal is furnished as below:

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal	Remarks
1	STP Sludge	STP	1.25	As per MoEF&CC Norms	Via Authorized vendors	
2	ETP Sludge	ETP	2	As per MoEF&CC Norms	Via Authorized vendors	
3	Fly & Bottom Ash	Boilers	3194028	As per MoEF&CC Norms	Via Authorized vendors	
4	Mill reject	Plant Process	7200	As per MoEF&CC Norms	Via Authorized vendors	
5	Municipal Solid Waste	Canteen, working zone, colony	360.9	As per MoEF&CC Norms	Via Authorized vendors	
6	Packing Material	Plant & Colony	3	As per MoEF&CC Norms	Via Authorized vendors	
7	Electrical and Electronic gadgets	Plant	1	As per MoEF&CC Norms	Via Authorized vendors	
8	Batteries	Plant	2.5	As per MoEF&CC Norms	Via Authorized vendors	
9	BMW	OHC/Clinic	0.2	As per MoEF&CC Norms	Via Authorized vendors	
10	Discarded containers	Plant process	0.5	Through authorized recycler/ CTSDF		
11	Used and waste Oil	Plant process	10	Through authorized recycler/ CTSDF		
12	Chemical sludge from waste water treatment	Plant process	25	Coprocessing, CTSDF, Preprocessing		

S. No.	Type of Waste	Source	Quantity generated (TPA)	Mode of Treatment	Disposal	Remarks
13	Contaminated cotton rages, cleaning material	Plant process	2	Coprocessing, CTSDF, Preprocessing		
14	Waste or residues containing oil	Plant process	100	Coprocessing, CTSDF, Preprocessing		
15	Spent ion exchange resin containing toxic metals	Plant process	3.6	Coprocessing, CTSDF, Preprocessing, incineration in boiler		
16	Wooden scrap	Plant process	2	Through authorized recycler		

28.10.14: Public Consultation: Public hearing for the proposed 2x800 MW (Phase - II) project was carried out on 07.05.2025 at Government College, Village Laharpur, Tehsil Jaithari, District- Anuppur (M.P.) in the presence of Regional Officer MPPCB & Mr. Dilip Kumar Panday, Additional Collector, Anuppur District, Madhya Pradesh. Advertisement for the same was published on 06.04.2025. The action plan and budget earmarked to address the public needs highlighted during public hearing held on 07.05.2025 is as below:

1.	Details of advertisement given	06.04.2025
2.	Date of public consultation	07.05.2025
3.	Venue	Government College, Village Laharpur, Tehsil Jaithari, District-Anuppur (M.P.) at 11.00 a.m.
4.	Presiding Officer	Mr. Mukesh Shrivastava, Regional Officer MPPCB & Mr. Dilip Kumar Panday, Additional Collector, Anuppur District, Madhya Pradesh.
5.	Major issues raised	Major issues raised during the PH were related to livelihood for elderly citizens and widows as agreed rehabilitation policy, Demand of employment, construction of community hall in nearby village, water supply and improvement in educational facilities, dust pollution, development of sports infrastructure, installation of streetlights, Pond deepening to assist in irrigation for the village, Development of medical/Health facilities, etc.

Action Plan as per MoEF&CC O.M dated 30/09/2020

		1st Year	2nd Year	3rd Year	4th Year	5th Year	(Rs. In Crores)	
A.	**Educational Initiatives**							

		1st Year	2nd Year	3rd Year	4th Year	5th Year	(Rs. In Crores)	
1	Education and drinking water Programs in Kyontar (**Support Class Program)**							Offering **free coaching classes** for students in **grades 3 to 7**, with a strong focus on **Foundational Literacy and Numeracy (FLN)**, in alignment with the **National Education Policy (NEP) 2020**.
2	Fee concession for students studying Bal Bharati Vidyalaya							MBPMPL confirms that: Free education upto class 12 for 2 children for each account holder. 25% discount in annual fee upto class 12 for non-account holders
3	Coaching classes for 10th and 12th class students	0.372	0.372	0.372	0.385	0.385	**1.886**	Coaching Classes for 10th & 12th Class students of project affected area will be started at a specially selected site during the construction period of Phase-II project.
4	Free educational materials for students studying in Amgawan Private school							Under CSR, free distribution of school bags and sanitary napkins has been done to girls studying in Private school in Amgawan.
5	Scholarship for Girl students, Kyontar							Providing scholarships to **40 girls** in **Kyontar**, covering **grades 8 to 12**. This initiative will be managed through a **third-party organization** to ensure effective distribution and support.

		1st Year	2nd Year	3rd Year	4th Year	5th Year	(Rs. In Crores)	
	Sub Total	**0.372**	**0.372**	**0.372**	**0.385**	**0.385**	**1.886**	
B	**Community Health Initiatives**							
6	Government to appoint one MD-Gynaecology and one MD Medicine fulltime in CHC Jaithari, Whose salary will be borne by MB Power	0.31	0.43	0.37	0.49	0.44	**2.04**	MD Gynocologist – 150000 per month MD Medicines – 150000 per month
7	The patient bed capacity in CHC, Jaithari will be increased by 10% and other necessary infrastructure will be built for it.							Every year patient bed capacity and required infrastructure will be increase.
	Sub Total	**0.31**	**0.43**	**0.37**	**0.49**	**0.44**	**2.04**	
C	**Sustainable Livelihood and Women Empowerment**							
8	Skill Development Training for Youths (Technical and Non-Technical Courses)							Vocational training on various courses to 200 candidates every year
9	Skill Development Training on basic Sewing training and sewing machine distribution	0.45	0.45	0.45	0.45	0.45	**2.25**	Vocational training on basic sewing and sewing machine distribution to 300 women for start their self-employment.
10	Tools, Equipment, and Starter Kits for SHGs and Farmers							Training and Material support to 30 SHGs (appx. 450 women) every year for start-up small enterprises.
	Sub Total	**0.45**	**0.45**	**0.45**	**0.45**	**0.45**	**2.25**	
D	**Community Rural Infrastructure Development**							
11	Community Hall (5)							Five community hall construction in Laharpur, Mahuda, Chandpur, Amgawan and Dhurwasin
12	Water requirement in Kyontar	1.29	0.51	0.45	0.1	0.45	**2.8**	Handpump- 5 (First year - Adiwasi Basti-1, Tikri Tola-2) (Second Year - Ramsagri Tola-1, Rohila Kahar-1)

		1st Year	2nd Year	3rd Year	4th Year	5th Year	(Rs. In Crores)	
13	Road maintenance in the routes from where the Ash transportation are done							Repair and Renovation of PMGSY-BT Road from chainage 9.25 (NH-43 Junction) to 2.40 (Abandoned Stone Mine Void) at Garhi Kotma.
14	Road Repairing							From Murra to Mahuda via Takhuli (6 km)
15	Pond Deepening in village Kyontar to assist in irrigation							Pond deepening-3 Nos in Kewotar (Tedhiya Pond, Belha Pond, Jal Dahai Pond) for rain water storage for irrigation
16	Street light Installation in Laharpur village (Appx. 5 km)							Street Light (100 watt per pol) in two phases – (1) Neeraj Petrol Pump to laharpur govt. collage (Nos-50) (2) Laharpur Govt. collage to Murra village turn (Nos-50)
	Sub Total	**1.29**	**0.51**	**0.45**	**0.1**	**0.45**	**2.8**	
E	**Development of Playgrounds for Sports**							
17	Improvement of Sports facility (Salary of Coach)	0.05	0.05	0.05	0.05	0.05	**0.25**	One coach to provide proper training to local youth in various sports such as - Cricket, football, volleyball badminton etc.
	Sub Total	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.25**	
F	**Community Development for various activities at village level**							
18	Plantation of trees under CSR in the premises of Schools, government buildings, institutions etc. under the project affected area.	0.02	0.02	0.02	0.02	0.02	**0.1**	Every year Plantation of 800 saplings (shed trees) within the premises of Govt. schools, Panchayat offices and institutions.
	Sub Total	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.1**	
G	**Green Belt Development**							

		1st Year	**2nd Year**	**3rd Year**	**4th Year**	**5th Year**	**(Rs. In Crores)**	
18	Plantation	1.84	1.84	2.3	2.3	2.3	10.58	Total 1,15000 Plant Species to be planted in five years.
	Sub Total	**1.84**	**1.84**	**2.3**	**2.3**	**2.3**	**10.58**	
	Total (A+B+C+D+E+F+G)	**4.332**	**3.672**	**4.012**	**3.795**	**4.095**	**19.906**	

28.10.15: Cost of project: Existing capital cost of the project was Rs .9000 Cr. The capital cost of the proposed project is Rs.19,200 Crores and the capital cost for environmental protection measures is proposed as Rs. 2109.5 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 46.22 Crores. The employment generation from the proposed project / expansion is 450 permanent positions. The details of cost for environmental protection measures is as follows:

S. No.	**Item Description**	**Cost (Rs. In Crores)**		
		Capital Cost	**Recurring Cost**	**Total**
1	Electrostatic Precipitator	534	11	545
2	Chimney	158.8	3.2	162
3	Aux. Cooling Towers incl. Civil Works	188.2	3.8	192
4	Ash Handling incl AWRS	225.4	4.6	230
5	Ash Dyke	23.75	1.25	25
6	Dust extraction & suppression System	8	1	9
7	DM plant waste treatment systems	58.2	1.8	60
8	Sewerage collection, treatment & disposal	1.96	0.04	2
9	Green Belt & Landscaping	10.87	0.92	11.5
10	De-NOx Control	862	18	880
11	Rainwater harvesting	5.88	0.12	6
12	Environmental Laboratory & Environmental Monitoring	11.83	0.17	12
13	CEMS, CAAQMS, EQMS monitoring system & Main gate display board	11.76	0.24	12
14	Wind Breaking wall, Dry Fog System & RCC Flooring in coal storage Area	3.92	0.08	4
15	Roof Top Solar 701.8 kWp @ 2.5 Cr/ MW	1.75	--	1.75
(Environmental Protection and Monitoring) Total in Rs in Cr		**2106.32**	**46.22**	**2152.54**
16	Carbon Sink development for 4 ha of degraded forest land	0.92	--	0.92
17	Watershed development plan	1.1	--	1.1
18	Wildlife Conservation Plan	1.16		1.16
(Additional Study) Total in Rs in Cr		**3.18**	**0**	**3.18**
Grand Total		**2109.5**		

28.10.16: Green belt development: Existing green belt has been developed in 102.637 ha area which is about 22.75% of the total project area of 451.202 ha. Additionally, 48.695 ha area shall be developed as green belt. Thus total of 151.332 ha area (33.54 % of total project area) will be developed as greenbelt. A 5 – 50 m (25 meter minimum) wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 1,19,000 saplings will be planted and nurtured in 48.695 hectares in 5 years.

28.10.17: Ash management

Year	Quantity generated (MT)	Quantity utilized (MT)	% of utilization	Balance quantity (MTP)	No of storage silos with capacity
2021-22	2184816.659	2189356.102	100.21	0	4
2022-23	2117475.21	2155390.612	101.79	0	4
2023-24	2295675.19	2311283	100.7	0	4

- Total Legacy/Pond ash available as on 31/03/2022 : 1418764.472 MT.
- Legacy ash/Pond ash stabilized and reclaimed in year 2022-23 : 1291796.0 MT.
- Legacy ash/Pond ash used in year 2022-23 : 37915.402 MT.

A. Fly ash Details for last three years = 5355266.36 TPA

S.No.	Activity (as applicable)	Quantity	Percentage	Remarks (Prior approval of SPCB details to be mentioned)
1.	Fly ash based products (bricks or blocks or tiles or fiber cement sheets or pipes or boards or panels)	74184.37	1.3853	NA
2.	Cement manufacturing	2847785.01	53.18	NA
3.	Filling up of low lying area	1453920.20	27.14935359	MPPCB permission obtained.
4.	Filling of mine voids:	979332.04	18.2872704	MPPCB permission obtained.
5.	Others (please specify)	45	0.00084	NA
	Total	**5355266.62**	**100.002764**	

B. Bottom ash generation for last three years = 1242701.29T

S. No.	Activity (as applicable)	Quantity	Percentage	Remarks (Prior approval of SPCB details to be mentioned)
1.	Filling up of low lying area	819039.70	65.9080	MPPCB permission obtained.
2.	Filling of mine voids	423661.59	34.0920	MPPCB permission obtained.
	Total	**1242701**	**100**	

C. Legacy ash details = 126764.472 T (Last Three Year)

S.No.	Activity (asapplicable)	Quantity	Percentage	Remarks (Prior approval of SPCB details to be mentioned)

1.	Filling up of low lyingarea	10503.98	8.286218	MPPCB permission obtained.
2.	Filling of mine voids	47561.27	37.5194	MPPCB permission obtained.
	Total	**58065.25**	**45.805618**	

D. Ash Pond details: -

S.No.	Details of Ash pond	Ash pond 1	Ash pond 2	Ash pond 3	Total
1.	Status of ash pond (Active / Exhausted (yet to be reclaimed)/ Reclaimed)	Reclaimed	Active	Proposed	(Active + Proposed)
2.	Area (Ha)	14.77	6.68	7.692	14.372
3.	Dyke height (m)	17	17	17	N.A.
4.	Volume (m^3)	1291796	173445	199721	N.A.
5.	Quantity of ash disposed (Metric Tons)	1291796	73445	-	
6.	Available volume in percentage (per cent) and quantity of ash can be further disposed (Metric Tons)	Nil	57.8	100	N.A.
7.	Expected life of ash pond (number of years and months)	N/A	30	30	N.A.
8.	Type lining carried in ash pond: HDPE lining of LDPE lining or clay lining or No lining	HDPE/ LDPE	HDPE/ LDPE	HDPE/ LDPE	N.A.
9.	Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD orLCSD)	N/A	MCSD/ LCSD	MCSD/ LCSD	N.A.
10.	Ratio of ash: water in slurry mix (1: _____):	N/A	30:70	30:70	N.A.
11.	Ash water recycling system (AWRS) installed and functioning : Yes or No	N/A	Yes	Yes	N.A.
12.	Quantity of wastewater from ash pond discharged into land or water body (m^3)	N/A	Nil	Nil	N.A.
13.	Last date when the dyke stability study was conducted and name of the organization who conducted the study:	--	Jan 2024 IIT Delhi	N.A	N.A.
14.	Last date when the audit was conducted and name of the organization who conducted the audit:		22-11-2024 NIT Delhi	N.A	N.A.

E. Proposed ash utilization plan for expansion project

Details	Existing generation (MTPA)	Proposed generation (MTPA)	Total	Utilization (MTPA)	% of utilization	Balance quantity (MTPA)	No of storage silos with capacity
Ash (Fly & Bottom)	22,95,675.29	28,86,592	51,82,267	51,82,267	100	0	11 storage silos with capacity 22 hours minimum.

Ash pond details:

S.No.	Details of Ash pond	Ash pond
1.	Area (Ha)	7.692
2.	Dyke height (m)	17
3.	Volume (m^3)	199721
4.	Quantity of ash to be disposed (Metric Tons)	159776 (80%)
5.	Expected life of ash pond (number of years and months)	30
6.	Type lining carried in ash pond: HDPE lining of LDPE lining or clay lining or No lining	HDPE lining will be provided in ash pond
7.	Mode of disposal: Dry disposal or wet slurry (in case of wet slurry please specify whether HCSD or MCSD or LCSD)	MCSD / LCSD
8.	Ratio of ash: water in slurry mix (1:_____):	30:70
9.	Ash water recycling system (AWRS): Yes or No	Yes
10.	Quantity of wastewater from ash pond to be discharged into land or water body (m^3)	N/A
11.	Details regarding dyke stability study and name of the organization who conducted the study:	IIT Delhi

28.10.18: Summary of violation under EIA, 2006/court case/show cause/direction if any, related to the project under consideration: Four court cases are pending, however, there is no Environment related court case registered.

A. Summary of court cases

S. No	Case No/ Title	Name of the Court	Brief summary ofthe case	Next date of hearing	Direction/ Action taken by thePP
1	CS (Comm) 282 of 2022	High Court, Delhi	Suit filed by MBPMPL against SBI for unlawfully withholding Bank Gurantee submitted by MBPMPL.	28.07.2025	NIL relevance with the proposed expansion project
3	W.P. (C) No. 9187 of2023	High Court Delhi	Petition filed challenging Ministry of Finance notification dated 10.03.2023 extending the timeline for granting exemption benefits on custom duty and not on excise by 156 months.	28.07.2025	NIL relevance with the proposed expansion project
2	WP(C) No. 1729 of 2023	High Court, Bilaspur	Writ Petition against levy of Engine Haulage charges by SECR pursuant to orders issued by Railway Board vide clarification dated 15.03.2021	--	NIL relevance with the proposed expansion project

S. No	Case No/ Title	Name of the Court	Brief summary ofthe case	Next date of hearing	Direction/ Action taken by thePP
3	WPC 13575 of 2023	High Court, Allahabad	Writ Petition against illicit seizure & auction of 13,022 MT coal by District magistrate Sonebhadra vide order dated 07-04-2023	--	NIL relevance with the proposed expansion project
4	WP (C) No. 7088 of 2022	High Court, Delhi	Writ Petition filed by MBPMPL seeking a refund of benefits (central excise/customs) under Mega Power Policy, which were paid by way of direct payments.	15.07.2025	NIL relevance with the proposed expansion project

B. Summary of Show Cause Notices: There are no Show Cause Notices pertaining to Environment & Forest.

C. Summary of violation: There is no violation case pertaining to the project under the Environment Protection Act, 1986; Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980; the Wildlife (Protection) Act, 1972.

Written submissions

28.10.19: The proponent has submitted the following written submission as suggested by the EAC during the meeting.

1. Revised Emission Modeling considering design condition for SO_2: The revised Air Dispersion Ground Level Concentration (GLCs) for SO_2 with Design coal quantity of 479.52 TPH (3400 kcal/kg) is 37.0 µg/m^3 (maximum GLC @ 1.9km in SE).

Ground level Concentration at AAQ receptors is given below:

Receptors	Baseline Concentration (µg/m^3)			Incremental GLCs (µg/m^3)			Resultant GLCs (µg/m^3)		
	PM	SO_2	NO_2	PM	SO_2	NO_2	PM	SO_2	NO_2
AAQ1	69.77	16.66	19.86	0.48	0.77	0.69	70.25	17.43	20.55
AAQ2	59.51	10.68	15.4	0.91	32.25	3.21	60.42	42.93	18.61
AAQ3	57.61	10.34	14.91	1.12	32.73	3.25	58.73	43.07	18.16
AAQ4	54.16	9.72	14.02	0.74	18.94	1.94	54.9	28.66	15.96
AAQ5	52.44	9.43	3.53	0.26	15.44	1.11	52.7	24.87	4.64
AAQ6	61.79	11.09	15.94	0.93	31.98	3.36	62.72	43.07	19.3
AAQ7	76.23	11.6	16.67	0.43	19.54	1.39	76.66	31.14	18.06
AAQ8	65.75	11.82	16.97	0.19	11.98	0.97	65.94	23.8	17.94
AAQ9	63.28	11.33	16.67	0.63	28.02	2.76	63.91	39.35	19.43
NAAQ Standard							**100**	**80**	**80**

Revised Ground level Concentration at AAQ receptors is given below:

Receptors	Baseline Concentration (µg/m^3)			Incremental GLCs (µg/m^3)			Resultant GLCs (µg/m^3)		
	PM	SO_2	NO_2	PM	SO_2	NO_2	PM	SO_2	NO_2
AAQ1	69.77	16.66	19.86	0.48	18.51	0.69	70.25	35.17	20.55

AAQ2	59.51	10.68	15.4	0.91	22.19	3.21	60.42	32.87	18.61
AAQ3	57.61	10.34	14.91	1.12	26.43	3.25	58.73	36.77	18.16
AAQ4	54.16	9.72	14.02	0.74	12.34	1.94	54.9	22.06	15.96
AAQ5	52.44	9.43	3.53	0.26	10.83	1.11	52.7	20.26	4.64
AAQ6	61.79	11.09	15.94	0.93	26.83	3.36	62.72	37.92	19.3
AAQ7	76.23	11.6	16.67	0.43	14.32	1.39	76.66	25.92	18.06
AAQ8	65.75	11.82	16.97	0.19	12.86	0.97	65.94	24.68	17.94
AAQ9	63.28	11.33	16.67	0.63	23.59	2.76	63.91	34.92	19.43
NAAQ Standard							**100**	**80**	**80**

2. Land break-up: The land break-up for the 2x800 MW Expansion project is given below:

- Area available within the plant boundary - 417.996 Ha
- Area outside the plant boundary - 33.206 Ha
- Total area for Phase-I & Phase-II - 451.202 Ha

Facilities	**Area for 2x630 MW - PH-1 (In Hectares)**	**Area for 2x800 MW - PH-2 (In Hectares)**	**Total Area for - PH-1 & PH-2 (In Hectares)**
I. Land available within existing plant boundary			
Plant Area	109.717	69.506	179.223
Reservoir	44.534	8.98	53.514
Ash Pond	6.68	7.692	14.372
Green belt (main plant)*	102.637	41.529	144.166
Misc infrastructure	8.097	2.024	10.121
Colony	16.599	0	16.599
Sub Total area within plant boundary - A	*288.264*	*129.731*	***417.996***
II. Additional Area			
Land for future use		11.579	11.579
Area for Railway line		14.462	14.462
Green belt along railway line*		7.166	7.166
Sub Total area outside plant boundary - B		*33.207*	***33.207***
Total area for Phase-I & Phase-II - (A+B)			**451.202**

*Greenbelt area

- The existing Greenbelt area is 102.637 Ha. Additional Greenbelt area development will be 48.695 Ha (41.529 Ha within plant boundary + 7.166 Ha along railway line).
- The total green belt for the project will be 151.332 Ha (102.637 Ha + 48.695 Ha), which is 33.54% of the total project area of 451.202 Ha.

The total area of the project (Existing + Proposed) is 451.202 Ha (417.996 Ha within plant boundary + 33.207 Ha outside).

3. Solar power: A detailed study has already conducted on the feasibility of installing solar panels on the existing buildings and raw water reservoir for solar power generation. The study suggested / recommended installation of 701.8 kWp in the available areas. However, proponent shall revisit the same and increase this to 1000 kWp.

Observations and deliberation of the EAC

28.10.19: The Committee observed and noted the following:

i. Instant proposal is for seeking Environment Clearance (EC) under the provisions of the EIA Notification, 2006 for the expansion by addition of 2x800 MW (1600 MW) Coal Based Ultra Super Critical Thermal Power Plant to existing 2x630 MW (1260 MW) by M/s. MB power (Madhya Pradesh) Limited located at village Laharpur, Murra, Guwari, Belia & Jethari, in Jaithari Tehsil, Anuppur District, Madhya Pradesh.

ii. The existing project was accorded environmental clearance vide lr.no. J-13012/99/2008-IA. II(T) dated 28/05/2010 and 07.05.2024 from MoEF&CC. Consent to Operate for the existing unit was accorded by Madhya Pradesh State Pollution Control Board vide lr. No. AW-61310 dated 05.11.2024. The validity of CTO is up to 31.03.2026.

iii. ToR was accorded in 16th EAC meeting held on 28.12.24 with a validity upto 28.12.2028.

iv. Total land required for the existing and proposed project is 451.202 Ha (417.996 within plant +33.207 outside) that has been acquired and is under possession of M/s MB Power **(**Madhya Pradesh) Ltd. Out of total project area of 451.202 Ha, an area of 37.875 Ha is Forest Land for which Stage I & Stage II Forest clearance was granted vide letter no.- 6-MPCO51/2009- BHO/1032 & 6-MPC051/2009-BHO/3598, Dated 17.08.2011.

v. As per the revised categorization given in the Wildlife (Protection) Amendment Act, 2022, total 33 Schedule I Species found in the buffer zone during field survey and secondary sources. The List of Flora & Fauna is duly authenticated by DFO, Anuppur vide letter dated 16.05.2025. A Wildlife Conservation & Management Plan (WLCP) has been prepared and submitted to Principal Chief Conservator of Forest (Wildlife), Govt. of Madhya Pradesh on dated 12.06.2025 for approval and the same is under process.

vi. Tipan River is located at 1.6 km from the project boundary. Water Resource Department vide letter dated 19.11.2024 has given certificate regarding HFL level of Tipan River. Highest HFL of Tipan River recorded is 499 m while the plant is at an elevation of approx. 502 m than the HFL of Tipan River. The project site is located at substantial higher elevation compared to the HFL of the river.

vii. The EAC also took into consideration the drone survey of the project site and KML file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH portal.

viii. There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site as ascertained from DSS.

ix. The project site is not located within the Critically Polluted Area (CPA) / Severally Polluted Area (SPA) as per CEPI assessment 2018 of CPCB.

x. The Status of compliance of EC (for unit 2x630 MW) was obtained from Regional Office, Bhopal, MoEF&CC on 10.05.2025. The Action taken report regarding the partially/non-complied conditions has been submitted to RO, MoEF&CC, Bhopal vide letter dated 25.06.2025. The report has been deliberated by the committee and found it satisfactory.

xi. Existing Water requirement is 68,400 m^3/day and it is obtained from Son River and permission for the same has been obtained from WRD, Govt. of Madhya Pradesh dated- 16.05.2018. The water requirement for the proposed project is estimated as 1,08,000 m^3 /day, out of which 95,808 m^3/day of freshwater requirement will be obtained from the Son river and the remaining requirement of

12,192 m^3 /day will be met from the treated water from the plant. The permission for drawl of groundwater / surface water is obtained from WRD, Govt of Madhya Pradesh Dated 25-102024. The water will be transported to the plant site through Pipeline.

xii. Coal requirement of 7.36 MMTPA for proposed Stage II (2x800 MW) project will be sourced from CIL mines. The entire coal requirement for for both phase I and phase II shall be transported by rail network only and no road transportation is permitted.

xiii. Existing power requirement of 75.6 MW (Aux. power approx. 6%) is obtained from Phase I (2×600MW) The power requirement for the proposed project is estimated as 96 MW, which will be obtained from the Phase II(2×630MW).

xiv. The Committee deliberated on the baseline data and incremental GLC due to the proposed project and observed that AAQ levels are within NAAQS.

xv. The Stage-II units (2x800 MW) will incorporate high-efficiency (with 99.99%) Electrostatic Precipitators (ESP) to control ash particle emissions. These ESPs will design to limit particulate emissions < 30 mg/Nm^3. Low NOx Burner, SOFA, SCR and combustion staging techniques to minimize NOx emissions from the steam generator. Chimney of 275 m height will be constructed for minimizing SOx emission. Dust Extraction and Dust Suppression system shall be implemented to minimize the pollution.

xvi. Committee deliberated on the action plan of Hydrogeology study and found it satisfactory.

xvii. The committee noted that with respect to water pollution control, proponent shall use Sewage treatment plant and treated sewage water shall be utilized for horticulture purpose. Effluent will be treated in ETP. There will be no effluent discharge from the premises, hence the ZLD will be maintained. Along with this, the water from the cooling towers will be recirculated. A state-of-the-art roof top rain water harvesting system will be provided to collect the run -off for ground water recharging.

xviii. The Fly Ash will be collected in dry form in silos for further utilization/transportation through rail wagons / closed trucks to adjacent Cement Plants. 100% Ash will be utilised in Cement Industries, reclamation of abandoned mines, manufacturing of bricks, road construction, and aggregate replacement in concrete, etc. as per Fly Ash Notification, 31st December'2021. Provision will be made for disposal of un-utilized ash in high concentration slurry form to ash dyke.

xix. Existing capital cost of project was Rs 9000 Cr. The capital cost of the proposed project is Rs.19,200 Crores and the capital cost for environmental protection measures is proposed as Rs 2109.5 Crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 46.22 Crores.

xx. Existing green belt has been developed in 102.637 ha area which is about 22.75 % of the total project area of 451.202 ha with total sapling of 2,87,350. Additional Greenbelt will be developed in 48.695 ha. Thus, total of 151.332 ha area (33.54 % of total project area) will be developed as greenbelt. A 5-50 m (25 meter minimum) wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. Local and native species will be planted with a density of 2500 trees per hectare. Total no. of 1,19,000 saplings will be planted and nurtured in 48.695 hectares in 3 years.

xxi. Public Hearing was conducted on 07.05.2025. The Committee looked in to the videography of the public hearing proceedings, deliberated on the public hearing issues along with action plan submitted by the proponent to address the issues

raised during the public hearing and found it satisfactory. The committee advised the PP to implement the PH action plan in a time bound manner. Total 19.906 crore budget has been allocated to address the public needs highlighted during public hearing.

xxii. The Committee noted that the EIA report is in compliance of the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components.

xxiii. Nickel concentrations in coal was observed higher. EAC suggested to revisit the data.

xxiv. EAC suggested for installation of 2 MW solar PV for energy conservation measures.

xxv. No court cases and show cause notices related to Environment are pending against the proposed project.

xxvi. The EAC also deliberated on the written submission of the project proponent and found it satisfactory.

xxvii. The committee is also of the view that a sub-committee of EAC shall visit the site after grant of EC (preferably after 4 months) for a review.

xxviii. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

Recommendations of the Committee:

28.10.20: In view of the foregoing and after detailed deliberations, the committee ***recommended*** the instant proposal for grant of Environment Clearance under the provisions of EIA Notification, 2006 **subject to uploading of written submission on PARIVESH Portal** and stipulation of the following specific conditions and general conditions based on project specific requirements:

A. Specific conditions

[A] Environmental Management

1. Project proponent shall adopt 100% utilization of ash generated as a result of the expansion project in accordance with the ash utilization notification dated 31/12/2021 and its subsequent amendment. Area for the additional ash pond proposed under the expansion project of 2x800MW shall not exceed 7.692 Ha as committed.
2. In addition to the existing 04 Continuous Ambient Air Quality Monitoring Stations (CAAQMS), project proponent shall install additional one continuous ambient air quality monitoring at suitable locations in and around project site in consultation with MPPCB within six months from the date of grant of EC as committed.
3. The water requirement for the proposed project is estimated as 1,08,000 KLD and out of which 95,808 m^3/day of fresh water requirement will be obtained from the Son River and the remaining requirement of 12,192 m^3 /day will be met from the treated water from the plant.
4. Project proponent shall comply with the recommendations made in the biodiversity assessment report and Hydrogeology report in a time bound manner. Compliance

status in this regard shall be submitted to the Regional Office of MoEF&CC along with the six monthly compliance report.

5. Project proponent shall store harvested rainwater in the project boundary and utilize the same for plantation, recharging water in the pond and domestic utilization in colonies. A record shall be maintained of water collected through rainwater and its supply system. PP shall get the water audit done every year to optimize the water requirement.
6. Project proponent shall implement the protective measure proposed in EMP in a time-bound manner. The budget earmarked for the same is Rs.2109.5 Crores (Capital) and Rs. 46.22 crores (recurring) and should be kept in separate accounts and audited annually. The implementation status along with the amount spent with documentary proof shall be submitted to the concerned Regional Office for the activities carried out during the previous year.
7. Project proponent shall assess the carbon footprint of the project and develop carbon sink/carbon sequestration resources using modern technologies. The implementation report shall be submitted to the concerned Regional Office of the MoEF&CC.
8. Project proponent shall ensure that diesel operated vehicles will be switched over to E-Vehicles/ CNG vehicles in a time bound manner, replace the passenger vehicles to E-vehicle in phased manner. Further, for local movement of officials, Contract of Vehicles deployment shall be awarded to Project affected people and all efforts for adopting heavy E-vehicles/CNG Vehicles like Bulkers for ash transportation for short distance subject to availability of such E-vehicle and adequate charging infrastructure in the surrounding area shall be provided. PP shall submit the action taken report to concerned RO with amount spent, photographs (before & after), number of such non diesel vehicles deployed etc. in six monthly compliance report.
9. The Project Proponent shall provide stack of 275 meters height and shall abide by the provisions of the notification number G.S.R 465 (E) dated 11/07/2025 related to FGD.
10. Ash pond area and fly ash utilization shall be as per Fly Ash Notification issued by Ministry/ CPCB from time to time.
11. Project proponent shall ensure that pipelines carrying the fly ash and effluent shall be inspected regularly for any leakages.
12. Effluent of 12,192 KLD will be treated through Effluent Treatment Plant. As committed by the Project proponent, Zero liquid discharge shall be adopted for the existing and the proposed plant. No wastewater will be discharged outside the project site.
13. PP shall install 2 MW solar PV for conservation measures. Action plan in this regard shall be submitted to the Regional Office of the MoEF&CC and SPCB within 6 months from the date of grant of EC.PP should explore more opportunities to put solar PV in near by School and other Government buildings also.
14. PP shall implement the concurrent plantation plan in a time bound manner. Total of 151.332 ha area (of total plant area of 451.202 ha) will be developed as greenbelt. A 5 m - 50 m (Minimum 25 meter) wide greenbelt, consisting of at least 3 tiers around plant boundary will be developed as greenbelt and green cover as per CPCB guidelines. PP shall also adopt Miyawaki plantation technique and plantation with minimum 2 meter height of the saplings in upcoming monsoon season. The budget earmarked for the green belt, plantation inside and outside the plant area, along the transportation route and Miyawaki Plantation area shall be kept in a separate account and audited annually. PP should annually submit the audited statement of expenditure along with proof of activities viz. photographs (before & after with geolocation date & time), details of expert agency engaged, details of species planted, number of

species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC and on PARIVESH Portal as the case may be for the activities carried out during previous year.

15. Project proponent shall carry out community plantation with incentive scheme by distributing 50,000 saplings per year for a period of five years. Further, PP shall provide basic facilities to the nearby schools such as drinking water, sanitation facilities and shall also develop green belt around the nearby schools. Regular watering of saplings planted in the nearby schools will be carried out by Project Proponent to mitigate the air and noise pollution. Further, PP shall organize quarterly awareness programs for school students to educate them on the significance and preservation of trees.
16. Wildlife conservation plan as approved by the competent authority shall be implemented. Additional, budget shall be added in the plan, in case additional measures suggested by state wildlife department. The final Wildlife conservation plan duly approved by the CWLW shall be submitted to RO, MoEF&CC within a time frame of three months from the date of grant of EC and the budget approved by the concerned authority shall be deposited in a government account.
17. Project proponent shall install LED display of air quality (Continuous AAQ monitoring) and stack emission (Continuous emission monitoring) at prominent locations preferably outside the plant's main entrance for public viewing and in administrative complex and maintenance of devices shall be done regularly.
18. Project proponent shall carry out Water Sprinkling on roads inside the plant area/ administrative/ residential areas and outside the plant area at least for 2 KM on a regular basis to control the air pollution. A logbook shall be maintained for the activity and be in six-monthly compliance report.
19. PP shall deploy vacuum based vehicle for everyday cleaning of the road in and around plant site at least for 5 KM.
20. Environment Audit of plant shall be done annually and report shall be submitted to Regional office of the Ministry.
21. A detailed action plan regarding leachate handling shall be prepared and implemented in consultation with SPCB and the same shall be submitted to the Regional Office of the Ministry. Leachate shall be treated and reused. No treated leachate shall be discharged in any circumstances. Characteristics of Leachate and the treated leachate shall be monitored once in quarter and records shall be maintained.
22. Oil and grease recovered from the treatment plant should be disposed only through authorized recyclers.
23. Monitoring of surface water quality and Ground Water quality shall also be regularly conducted in and around the project site and records to be maintained. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall also be undertaken and results/findings submitted along with half yearly monitoring report. The monitored data shall be submitted regularly on PARIVESH portal as part of Half Yearly compliance report
24. For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
25. PP shall ensure that all types of plastic waste generated from the plant shall be stored separately in isolated area and disposed of strictly adhering to the Plastic Waste Management Rules 2016 (as amended). In pursuant to the Ministry's OM dated 18/07/2022. PP shall also create awareness among the people working in the project

area as well as in its surrounding area on the ban on Single Use Plastic (SUP) in order to ensure compliance of Ministry's Notification published by the Ministry on 12/08/2021. A report along with photograph on the measures taken shall also be included in the six monthly compliance report submitted by PP.

26. PP is advised to implement the ***'Ek Ped Maa Ke Naam***' Campaign which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than Green belt development. The action in this regard shall be submitted concerned RO in six monthly report.

[B] Socio-economic

1. A vision document comprising prospective plan for implementation of various CER activities, plantation programme outside the project cover area, rejuvenation and conservation of water bodies within 5 km radius of the project cover area shall be prepared and submitted to the Regional Office of the Ministry within 6 months. Implementation status of the same shall be reported to the Regional office in 6 monthly compliance report.
2. Epidemiological Study among population within 5 km radius of project cover area shall be carried out on regular interval (Once in two year) through independent agency. Necessary measures shall be taken as per findings of study in consultation with district administration. Action taken report shall be submitted to the Regional Office of the Ministry.
3. The budget proposed for PH is Rs19.906 Crores. The budget proposed shall be kept in a separate account and audited annually. Project proponent shall implement the action plan to address the issues raised during public hearing within a time frame of 5 years from the date of grant of EC. In addition to this, PP shall strengthen the existing Primary Health Center (PHC) & Community Health Center (CHC) in the study area for better public health as committed. Compliance status in this regard shall be submitted along with the six monthly compliance to the concerned Regional Office of MoEF&CC.
4. The establishment of a robust public grievance redressal mechanism to address concerns and complaints from local communities regarding the power plant's operations, environmental impacts, or social issues shall be developed. A Senior Officer shall review the functioning of the mechanism twice in a month.

[C] Miscellaneous

1. An Environmental Cell headed by the Environment Manger with postgraduate qualification in environmental science/environmental engineering, shall be created. It shall be ensured that the Head of the Cell shall directly report to the Head of the Plant who would be accountable for implementation of environmental regulations and social impact improvement/mitigation measures.
2. Consent for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
3. All necessary clearance from the concerned Authority, as may be applicable should be obtained prior to commencement of project or activity.
4. A sub Committee of the EAC shall visit the site post EC to recommend any further mitigation measures.

B. General conditions

A. Statutory compliance:

1. Emission Standards for Thermal Power Plants as per Ministry's Notification S.O. 3305 (E) dated 7.12.2015, G.S.R.593 (E) dated 28.6.2018 and as amended from time to time shall be complied.
2. Part C of Schedule II of Municipal Solid Wastes Rules, 2016 dated 08.04.2016 as amended from time to time shall be complied for power plants based on Municipal Solid Waste.
3. MoEF&CC Notifications on Water Consumption vide Notification No. S.O. 3305 (E) dated 07.12.2015 read with G.S.R 593 (E) dated 28.6.2018 as amended from time to time shall be complied.
4. The recommendation from Standing Committee of NBWL under the Wildlife (Protection) Act, 1972 should be obtained, if applicable.
5. No Objection Certificate from Ministry of Civil Aviation be obtained for installation of requisite chimney height and its siting criteria for height clearance.

B. Ash content/ mode of transportation of coal:

1. MoEF&CC Notification issued vide S.O. 1561 (E) dated 21.05.2020 and as amended from time to time shall be complied which inter-alia include use of coal by Thermal Power Plants, without stipulations as regards ash content or distance, shall be permitted subject to compliance of conditions prescribed under (1) Setting Up Technology Solution for emission norms, (2) Management of Ash Ponds and (3) Transportation.

C. Air quality monitoring and Management:

1. Project proponent shall abide by the provisions of the notification number G.S.R 465(E) dated 11/07/2025 related to FGD.
2. Low NO_X Burners with Over Fire Air (OFA) system shall be installed to achieve NO_X emission standard of 100 mg/Nm^3.
3. High efficiency Electrostatic Precipitators (ESPs) shall be installed in each unit to ensure that particulate matter (PM) emission to meet the stipulated standards of 30 mg/Nm^3.
4. Stack with a height of 275 meters shall be provided with continuous online monitoring instruments for SO_2, Nox and Particulate Matter as per extant rules.
5. Exit velocity of flue gases shall not be less than 20-25 m/s. Mercury emissions from stack shall also be monitored periodically.
6. Continuous Ambient Air Quality monitoring system shall be set up to monitor common/criteria pollutants from the flue gases such as PM_{10}, $PM_{2.5}$, SO_2, NO_X within the plant area at five locations. The monitoring of other locations (at least three locations outside the plant area covering upwind and downwind directions at an angle of 120° each) shall be carried out manually.
7. Adequate dust extraction/suppression system shall be installed in coal handling, ash handling areas and material transfer points to control fugitive emissions.
8. Appropriate Air Pollution Control measures (Des/DSs) be provided at all the dust generating sources including sufficient water sprinkling arrangements at various locations viz., roads, excavation sites, crusher plants, transfer points, loading and unloading areas, etc.

D. Noise pollution and its control measures:

1. The Ambient Noise levels shall meet the standards prescribed as per the Noise Pollution (Regulation and Control) Rules, 2000.
2. Persons exposed to high noise generating equipment shall use Personal Protective Equipment (PPE) like earplugs/ear muffs, etc.
3. Periodical medical examination on hearing loss shall be carried out for all the workers and maintain audiometric record and for treatment of any hearing loss including rotating to non-noisy/less noisy areas.

E. Human Health Environment:

1. Bi-annual Health check-up of all the workers is to be conducted. The study shall take into account of chronic exposure to noise which may lead to adverse effects like increase in heart rate and blood pressure, hypertension and peripheral vasoconstriction and thus increased peripheral vascular resistance. Similarly, the study shall also assess the health impacts due to air polluting agents.
2. Impact of operation of power plant on agricultural crops, large water bodies (as applicable) once in two years by engaging an institute of repute. The study shall also include impact due to heavy metals associated with emission from power plant.

F. Water quality monitoring and Management:

1. Induced/Natural draft closed cycle wet cooling system including cooling towers shall be set up with minimum Cycles of Concentration (COC) of 5.0 or above for power plants using fresh water to achieve specific water consumption of 3.0 m^3/MWhr.
2. In case of the water withdrawal from river, a minimum flow 15% of the average flow of 120 consecutive leanest days should be maintained for environmental flow whichever is higher, to be released during the lean season after water withdrawal for proposed power plant.
3. Records pertaining to measurements of daily water withdrawal and river flows (obtained from Irrigation Department/Water Resources Department) immediately upstream and downstream of withdrawal site shall be maintained.
4. Regular (at least once in six months) monitoring of groundwater quality in and around the ash pond area including presence of heavy metals (Hg, Cr, As, Pb, etc.) shall be carried out as per CPCB guidelines. Surface water quality monitoring shall be undertaken for major surface water bodies as per the EMP. The data so obtained should be compared with the baseline data so as to ensure that the groundwater and surface water quality is not adversely impacted due to the project & its activities.
5. The treated effluents emanating from the different processes such as DM plant, boiler blow down, ash pond/dyke, sewage, etc. conforming to the prescribed standards shall be re-circulated and reused. Sludge/ rejects will be disposed in accordance with the Hazardous Waste Management Rules.
6. Hot water dispensed from the condenser should be adequately cooled to ensure the temperature of the released surface water is not more than 5 degrees Celsius above the temperature of the intake water.
7. Wastewater generation of 12,192 KLD from various sources (viz. cooling tower blowdown, boiler blow down, wastewater from ash handling, etc) shall be treated to meet the standards of pH: 6.5-8.5; Total Suspended Solids: 100 mg/l; Oil & Grease: 20 mg/l; Copper: 1 mg/l; Iron:1 mg/l; Free Chlorine: 0.5; Zinc: 1.0 mg/l; Total Chromium: 0.2 mg/l; Phosphate: 5.0 mg/l.

8. Sewage generation of 72 KLD will be treated by setting up Sewage Treatment plant to maintain the treated sewage characteristics of pH: 6.5-9.0; Bio-Chemical Oxygen Demand (BOD): 30 mg/l; Total Suspended Solids: 100 mg/l; Faecal Coliforms (Most Probable Number): <1000 per 100 ml.
9. Action plan by the TPPs located within 50 km of a municipality or any Urban Local Body (ULB) to use the treated sewage water produced by the municipality/Urban Local Body (ULB) to reduce fresh water consumption shall be submitted.

G. Risk Mitigation and Disaster Management:

1. Adequate safety measures and environmental safeguards shall be provided in the plant area to control spontaneous fires in coal yard, especially during dry and humid season.
2. Storage facilities for auxiliary liquid fuel such as LDO and HFO/LSHS shall be made as per the extant rules in the plant area in accordance with the directives of Petroleum & Explosives Safety Organisation (PESO). Sulphur Content in the liquid fuel should not exceed 0.5%.
3. Ergonomic working conditions with First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
4. Safety management plan based on Risk Assessment shall be prepared to limit the risk exposure to the workers within the plant boundary.
5. Regular mock drills for on-site emergency management plan and Integrated Emergency Response System shall be developed for all kind of possible disaster situations.

H. Green belt and Biodiversity conservation:

1. Green belt shall be developed in an area of 33% of the total plant area with indigenous native tree species in accordance with CPCB guidelines. The green belt shall inter-alia cover an entire periphery of the plant.
2. In-situ/ex-situ Conservation Plan for the conservation of flora and fauna should be prepared and implemented.

I. Waste management:

1. Solid waste management should be planned in accordance with extant Solid Waste Management Rules, 2016.
2. Toxicity Characteristic Leachate Procedure (TCLP) test shall be conducted for any substance, potential of leaching heavy metals into the surrounding areas as well as into the groundwater.
3. Ash pond shall be lined with impervious liner as per the soil conditions. Adequate dam/dyke safety measures shall also be implemented to protect the ash dyke from getting breached.
4. Fly ash shall be collected in dry form and ash generated shall be used in phased manner as per provisions of the Notification on Fly Ash Utilization issued by the Ministry S.O. 5481 dated 31.12.2021, S.O.6169 (E) dated 30.12.2021, S.O.05 (E) dated 01.01.2024 and amendment thereto.
5. Unutilized ash shall be disposed off in the ash pond in the form of High Concentration Slurry method and Lean Slurry method. Ash water recycling system shall be set up to recover supernatant water.

J. Monitoring of compliance:

1. Environmental Audit of the project be taken up by the third party for preparation of Environmental Statement as per Form-V & Conditions stipulated in the EC and report be submitted to the Ministry.
2. Resettlement & Rehabilitation Plan as per the extant rules of Govt. of India and respective State Govt. shall be followed, if applicable.
3. Energy Conservation Plan to be implemented as envisaged in the EIA / EMP report. Renewable Energy Purchase Obligation as set by MoP/State Government shall be met either by establishing renewable energy power plant (such as solar, wind, etc.) or by purchasing Renewable Energy Certificates.
4. Energy and Water Audit shall be conducted at least once in two years and recommendations arising out of the Report should be followed. A report in this regard shall be submitted to Ministry's Regional Office.
5. The project proponent shall (Post-EC Monitoring):
   a. Send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government;
   b. upload the clearance letter on the web site of the company as a part of information to the general public.
   c. inform the public through advertisement within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forest and Climate Change (MoEF&CC) at http://parviesh.nic.in.
   d. upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same periodically;
   e. monitor the criteria pollutants level namely; PM (PM_{10} & $PM_{2.5}$ in case of ambient AAQ), SO_2, Nox (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company;
   f. submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB;
   g. submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company;
   h. inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project and the date of commencement of the land development work.\

K. Corporate Environmental Responsibility (CER) activities:

1. CER activities will be carried out as per Ministry's OM F.No.22- 65/2017- IA.III dated 30th September, 2020 and 22-65/2017- IA.III dated 25.02.2021 or as proposed by the PP in reference to Public Hearing or as earmarked in the EIA/EMP report along with the

detailed scheduled of implementation with appropriate budgeting. Statement on the commitments (activity-wise) made during public hearing to facilitate the discussion on the CER in compliance of the shall be submitted.

Agenda No. 28.11

28.11 Transfer of Environment Clearance (EC) dated 29.03.1989 titled "500 MW (2 x 250 MW) coal based Dahanu thermal power plant" from M/s. North Maharashtra Power Limited (erstwhile known as M/s. Bombay Suburban Electric Supply Limited) to M/s. Adani Power Limited located at Village: Agwan, Taluka: Dahanu, District: Palghar, Maharashtra – **Consideration for condonation of delay in transfer of EC as per MoEF&CC O.M. dated 19/02/2025 – regarding.**

[Proposal No. IA/MH/THE/516506/2025.; F. No. J-13011/24/87-1A (Vol-II)]

28.11.1: M/s. Adani Power Limited has made online application vide proposal no. IA/MH/THE/516506/2025 dated 28/12/2024 along with Form - 7 and sought for transfer of Environmental Clearance accorded by the Ministry vide letter F. no. J-13011/24/87-IA (Vol-II) dated 29/03/1989 for the project mentioned above.

28.11.2: The details of the EC transfer proposal is given as below:

i. MoEF&CC accorded EC in the name of M/s. Bombay Suburban Electric Supply Ltd. (BSES) vide letter no. J-13011/24/87-IA (Vol-II) dated 29/03/1989 for setting up of "500 MW (2 x 250 MW) coal based Dahanu thermal power plant located at Village: Agwan, Taluka: Dahanu, District: Palghar, Maharashtra". The project has been implemented and the unit is under operation presently.

ii. EC dated 29/03/1989 was transferred to different project entities as given below:

SN	Transferor	Transferee	Date of Transfer	Approving Authority
1	Bombay Suburban Electricity Supply Ltd	BSES Limited	23rd December 1992	ROC, Maharashtra, Bombay
2	BSES Limited	Reliance Energy Limited	24th February 2004	ROC, Maharashtra, Mumbai
3	Reliance Energy Limited	Reliance Infrastructure Limited	28th April 2008	ROC, Maharashtra, Mumbai
4	Reliance Infrastructure Limited	Reliance Electric Generation and Supply Limited	19th January 2017	High Court, Mumbai
5	Reliance Electric Generation and Supply Limited	Adani Electricity Mumbai Limited	31st August 2018	ROC, Mumbai
6	Adani Electricity Mumbai Limited	North Maharashtra Power Limited	26th September 2024	Business Transfer Agreement

SN	Transferor	Transferee	Date of Transfer	Approving Authority
7	North Maharashtra Power Limited	Adani Power Limited	30th September 2024	Business Transfer Agreement

iii. It is inferred from above that the EC dated 29/03/1989 was under the possession of Adani Group since 31/08/2018. Thereafter, the EC was further transferred between the group companies of Adani on 26/09/2024 and 30/09/2024 respectively. Presently, the entity namely M/s. Adani Power Limited has acquired the project and owning the EC dated 29/03/1989 since 30/09/2024 and accordingly name change in the Consent To Operate (CTO) from MPCB was obtained on 18/04/2025.

iv. Ministry vide O.M. dated 03/11/2023 directed all the project proponents who have not yet applied till date for transfer of EC as per the provisions of EIA Notification 2006, even after one year from the date of change in ownership and/or change in name of the Company, shall apply for the same within a period of 6 months from the date of issue of this Office Memorandum, and the same shall not be considered as non-compliance of EC condition. In case of time limit is more than 6 months, considered as a non-compliance of EC condition and action shall be initiated on the project proponent as per the existing rules. The said O.M. was further amended on 19/02/2025, wherein following procedure was delineated to deal with the non-compliance of EC condition:

Step 1: The Project proponent shall apply on PARIVESH portal with the detailed justification for the delay in applying for transfer of EC, after a period of twenty-four months.

Step 2: The concerned Member Secretary shall obtain the Certified Compliance Report (CCR) for the project from the concerned Regional Office of the Ministry.

Step 3: The proposal and the justification along with the CCR shall be referred to the concerned sectoral EAC or SEAC as the case may be. The Committee shall check the status of compliance and the justification provided for the delay in applying for the transfer of EC and give its recommendations on condonation of delay or otherwise.

Step 4: In cases where the committee has recommended for the condonation of delay, the file shall be processed for transfer of EC with condonation of delay by the Hon'ble Minister for Environment Forest and Climate Change at the central level and the concerned Chairman, SEIAA at the State level.

v. Proponent vide proposal no. IA/MH/THE/516506/2025 dated 28/12/2024 applied for transfer of EC dated 29/03/1989 from M/s. North Maharashtra Power Limited (erstwhile known as Bombay Suburban Electric Supply Limited) to M/s.Adani Power Limited which was beyond the timeframe of six months i.e., 03/05/2024 as per O.M. dated 03/11/2023. In view of this, proponent was asked to submit the certified compliance report and justification for delay in applying for the transfer of EC in terms of the procedure delineated under the O.M. dated 19/02/2025.

vi. Proponent submitted the certified compliance report and justification for delay in applying for the transfer of EC on 29/03/1989. Proposal was placed before the EAC consideration in its meeting held on 13/08/2025 under Additional agenda item.

28.11.3: M/s Adani Power Limited made a presentation before the Committee by submitting the following:

A. Compliance status to the conditions prescribed in the EC dated 29/03/1989

Certified Compliance Report (CCR) dated 04/06/2025 was issued by the Regional Office (RO), MoEFCC, Nagpur for the status of implementation of EC, post a site visit to Thermal Power Plant, Dahanu on 20/05/2025 & 21/05/2025. As per the report, all the conditions prescribed in the EC are being complied with.

B. Details of the EC transfer

Sl. No.	Points	Details
1.	Date of submission of Application	28/12/2024
2.	Name of the transferor	M/s. North Maharashtra Power Limited (erstwhile known as Bombay Suburban Electric Supply Limited")
3.	Corporate Identification Number (CIN) of the transferor, if applicable	U27104GJ2024PLC154031
4.	Name of the transferee	M/s. Adani Power Limited
5.	Corporate Identification Number (CIN) of the transferee	U40100GJ1996PLC030533
6.	Date of transfer/acquisition/ demerger/change in name/ change in ownership etc.	EC dated 29/03/1989 was under the possession of Adani Group since 31/08/2018. Thereafter, the EC was further transferred between the group companies of Adani on 26/09/2024 and 30/09/2024 respectively. With effect from 30/09/2024, the entity namely M/s. Adani Power Limited is owning the EC dated 29/03/1989 and accordingly name change in the Consent To Operate (CTO) from MPCB was obtained on 18/04/2025.
7.	Reasons for transfer of EC	Project has been acquired by M/s. Adani Power Limited on 30/09/2024.
8.	Whether the EC transfer proposal involves change of ownership (Yes/No)	Yes
9.	EC granted and its subsequent amendments	Date of grant: 29/03/1989
10.	Involvement of Forest Land (if applicable)	Not applicable
11.	Name transfer of stage I & II FC (if applicable)	Not Applicable
12.	Approval obtained from Standing Committee for National Board of Wildlife (if applicable)	Not applicable
13.	Status of implementation of EC	Fully implemented.

14.	Whether Consent to Establish has been transferred	Not applicable. CTO is already transferred in the name of M/s. Adani Power Limited on 18/04/2025 from MPCB. Units are Operational.
15.	Whether Consent to Operate has been transferred in favour of transferee	Yes. Consent to Operate (CTO) has been obtained in the name of M/s. Adani Power Limited vide consent no. Format 1.0/CAC/UAN No. MPCB_CONSENT_AMENDMENT-0000014865/CR/2504000345 dated 18th April 2025 and valid upto 31st August, 2028.
16.	In case of CTO/ CTE not transferred, Proof of submission of application to the concerned SPCB/PCCs for transfer of CTE/CTO as per MoEF&CC OM dated 03/11/2023	CTO is already transferred in the name of M/s. Adani Power Limited on 18/04/2025 from MPCB.
17.	NOC by transferor as per para 11 of EIA Notification, 2006	NOC has been submitted.
18.	Undertaking by transferee by way of an affidavit in a non-judicial stamp paper as per para 11 of EIA Notification, 2006	Undertaking has been submitted.
19.	Whether the proposal submitted within the prescribed timelines in terms of OM dated 03.11.2023 & 19.02.2025: (i) Within 12 months of transfer, or (ii) Within 24 months of transfer and needs condonation of delay Within 6 months window period in terms of para 10 of the OM dated 03.11.2023	No. APL inadvertently missed to apply during the stipulated time period. However, as per Ministry's instructions and OM dated 19.02.2025, the process of Transfer of EC has been taken up now.

C. Reasons for delay in transfer of EC as per MoEF&CC OM dated 03/11/2023 and 19/02/2025.

- As per the O.M. dated 03/11/2023, time period of 6 months from the date of issue of the O.M was granted to apply for Transfer of EC.
- Currently, the power plant is acquired (on 30.09.2024) & operated by Adani Power Limited (APL). During the due diligence process as a part of acquisition, APL has submitted application for transfer of EC as per the MoEF&CC OM dated 03.11.2023.
- Proponent apologizes for the delay in obtaining the Environmental Clearance (EC) transfer. The delay was inadvertent and stemmed from our unawareness of the specific requirements outlined in the Ministry of Environment, Forest and Climate Change (MoEF&CC) Office Memorandum dated 03.11.2023.
- Certified Compliance Report (CCR) dated 04/06/2025 was issued by the Regional Office (RO), MoEF&CC, Nagpur for the status of implementation of EC, post a site visit to Thermal Power Plant, Dahanu on 20/05/2025 & 21/05/2025.

- APL, Dhanu TPP has always been following all the guidelines and conditions stipulated in the EC, related MoEF&CC notifications and the conditions mentioned in CTO granted by MPCB.
- In light of the circumstances, proponent requested that the delay be condoned and the proposal be kindly considered for the further Transfer of Environmental Clearence from "North Maharashtra Power Limited" (erstwhile known as Bombay Suburban Electric Supply Limited) to "Adani Power Limited".

28.11.4: Summary of court cases/ Show Cause Notices (last two years): Nil

28.11.5: Observation and deliberations by the EAC

i. Instant proposal is for transfer in the Environmental Clearance accorded by the Ministry vide letter F. no. J-13011/24/87-IA (Vol-II) dated 29/03/1989 from M/s. North Maharashtra Power Limited (erstwhile known as M/s. Bombay Suburban Electric Supply Limited) to M/s. Adani Power Limited

ii. Proposal was referred to EAC by the Ministry in accordance with the MoEF&CC OM dated 19/02/2025.

iii. The Committee deliberated on the CCR dated 04/06/2025 and observed that all the conditions prescribed in the EC dated 29/03/1989 and its subsequent amendment are being complied with.

iv. Committee noted that reasons delay in submission of EC transfer application was APL was inadvertently failed to apply during the stipulated time period as per MoEF&CC O.M. dated 03/11/2023.

Recommendations of the Committee

28.11.6: In view of the foregoing and after detailed deliberations, the Committee **recommend** for the condonation of delay and file shall be processed as per MoEF&CC O.M. dated 19/02/2025 for transfer of Environment Clearance (EC) dated 29.03.1989 titled "500 MW (2 x 250 MW) coal based Dahanu thermal power plant located at Village: Agwan, Taluka: Dahanu, District: Palghar, Maharashtra" from M/s. North Maharashtra Power Limited (erstwhile known as M/s. Bombay Suburban Electric Supply Limited) to M/s. Adani Power Limited under EIA, 2006.

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ANNEXURE-I

LIST OF PARTICIPANTS OF EAC (THERMAL) IN 28th MEETING HELD ON 12-13TH AUGUST, 2025 THROUGH PHYSICAL MODE

S. No.	Name & Address	Role	12.08.2025	13.08.2025
1.	Shri Inder Pal Singh Matharu, (I.F.S. Retd.)	Chairman	Present	Present
2.	Shri Lalit Kapur	Member	Present	Present
3.	Dr. Umesh Jagannathrao Kahalekar	Member	Present	Present
4.	Dr. Santosh Kumar Hampannavar	Member	Present	Present
5.	Shri Savalge Chandrasekhar	Member	Present	Present
6.	Shri K. B. Biswas	Member	Present	Present
7.	Prof. Shyam Shanker Singh	Member	Present	Present
8.	Dr. Vinod Agrawal	Member	Present	Present
10.	Shri Mahi Pal Singh, Chief Engineer	Representative of Central Electricity Authority (CEA)	Present	Present
11.	Shri Harmeet Sawhney, Scientist 'E'	Representative of Indian Meteorological Department (IMD)	Present	Present
12.	Prof. R M Bhattacharjee	Representative of IIT/ISM Dhanbad	Present	Present
13.	Shri Prasoon Gargava, Scientist 'F'	Representative of Central Pollution Control Board	Present	Present
13.	Shri Sundar Ramanathan	Scientist 'F' & Member Secretary	Present	Present
14.	Dr. Rajesh Prasad Rastogi	Scientist 'D'	Present	Present
Special Invitees for the EAC – Thermal held on 12/08/2025				
15.	Mr K K Sharma (for Item no. 28.2)	Chief Engineer, Municipal Corporation of Delhi (MCD)	Present (Physical)	-
16.	Mr Manoj Verma (for Item no. 28.2)	SE (MCD)		-
17.	Shri RK Singh, Regional Officer (for Item no. 28.4)	Uttar Pradesh Pollution Control Board	Present through VC mode	

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ANNEXURE-II

APPROVAL OF CHAIRMAN – EAC

8/25/25, 6:23 PM (136 unread) - Inbox - Mail (rp.rastogi@gov.in)

Re: FINAL MOM OF 28 EAC (THERMAL) MEETING HELD ON 12-13TH AUGUST 2025

Inderpal Singh Matharu <matharu0204@gmail.com>
Mon, 25 Aug 2025 5:37:46 PM +0530 INBOX
"RAJESH PRASAD RASTOGI" <rp.rastogi@gov.in>
TLS Learn more

Warning: Possible spam
The email has been sent from an external organization. Be alert when clicking any links, downloading attachments or sending sensitive information to this sender.

Dear Rastogi ji,
I have gone through the final draft MoM of the 28th EAC- Thermal held on 12-13 August 2025 sent by you. In this all the points have been incorporated including the comments of Mr.Umesh sir and other amendments done in Zero draft of it. I agree with the above Final draft of MoM.
Hence I approve the final MoM of the 28th EAC- Thermal .

Sincerely yours

Inder Pal Singh Matharu
Chairman
EAC Coal mining and Thermal power
MoEF&CC
GoI